

# Architectural Practice and the Planning of Minor Palaces in Renaissance Italy: 1510-1570

by

Claudio C. Pereira

Bachelor of Architecture

Instituto Ritter dos Reis, Brazil, 1985

Master of Architecture

Universidade Federal do Rio Grande do Sul, Brazil, 1993

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Signature of author:

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Department of Architecture

April 27, 1998

Certified by:

---

David Hodes Friedman

Associate Professor of the History of Architecture

Thesis Supervisor

Accepted by:

---

Stanford Anderson

Professor of History and Architecture

Head of Department of Architecture

JUN 17 1998

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## **READERS:**

Howard Burns

Professor, Istituto Universitario di Architettura di Venezia

Mark Jarzombek

Associate Professor of the History of Architecture, MIT

Henry A. Millon

Visiting Professor of History and Architecture, MIT

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## **ABSTRACT**

This dissertation proposes to study how the commission and design of minor palaces contribute to the understanding of architectural practice in early 16th century Italy. The particular nature of the small urban palace as a reduced and less expensive version of larger palaces and its recurrent nature in the practice of architects make this type of building very important in illustrating the changes in the profession at that time. Minor palace commissions also show architects dealing with a growing private market for the exercise of the profession: in Rome, the architect's clients belong to a lesser nobility composed of merchants and professional men (doctors, lawyers, notaries, artists, diplomats, bureaucrats) mostly connected to the Papal civil service. Moreover, the planning of these buildings manifest the increasing specialization of the profession at that time, when expertise in Ancient Roman architecture and the mastering of new instruments of representation (orthogonal projection, perspective, sketches) were added to the usual technical and artistic skills required of an architect.

The dissertation focus on how architects define a planning procedure to cope with the new set of circumstances related to the commission of a minor palace (budget, site, program, recurrence). The design of a palace comprised different

functions arranged in horizontal sequence with a few vertical connections; therefore, drawings of plans were the central instrument of their design. The dissertation is primarily based on the study of original plans that illustrate the working methods of 16th century Italian architects. Three of them were chosen (Antonio da Sangallo the Younger, Baldassare Peruzzi and Andrea Palladio) based on their activity as designers of minor palaces and the existence of a substantial amount of plans for this kind of building by them. A second part of this work presents a general view of the working procedures employed by these three architects in commissions of minor palaces. Through the study of their drawings and planning procedures, this dissertation intends to illustrate the establishment of the modern sense of architectural practice in 16th century Italy as shown through the design of minor palaces.

Thesis Supervisor: David Hodes Friedman

Title: Associate Professor of the History of Architecture



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## INTRODUCTION

The term “palazzo” is derived from the popular denomination (“palatium”) given to the imperial residence in Ancient Rome, located on the Palatine hill. During the Middle Ages, the term was used all over Italy to describe the residences of princes and bishops and also for the seats of communal government and administration of justice. Therefore, in many towns of Italy one finds buildings such as the Palazzo Comunale, Palazzo del Popolo, Palazzo della Ragione, Palazzo Ducale and Palazzo Arcivescovile. The building contract for the facade of the Palazzo Sansedoni in Siena (1340) seems to be the first documented mention of the term (“palaço”) applied to a private residence without public or official connotations.<sup>1</sup> In 15th century Florence, The Palazzo Corsi-Horne was described in documents as “palageto,” a diminutive of the Florentine “palagio” or palace.<sup>2</sup> Therefore, from mid-14th century on, “palaço” or “palagio” starts to define patrician residences as distinguished from more common urban houses. The use of a diminutive for the Palazzo Corsi-Horne (begun c. 1489) means that private palaces were already being hierarchically classified according to their size. In fact, Florentine private palaces in the 15th century can be subdivided in two categories: the monumental ones (Medici, Pitti, Strozzi; *fig. 1*) and the minor ones (Boni-Antinori, Pazzi, Corsi-Horne, Gondi, Scala, etc.).

One of the few dependable references today to set a standard to classify these buildings is the comparison of their ground floor areas. The Medici and

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<sup>1</sup>Toker, Franklyn. “Gothic architecture by remote control: an illustrated building contract of 1340” in *Art Bulletin* LXVII, 1985: pp. 68-94.

<sup>2</sup>Mandelli, Emma. *Palazzi del Rinascimento. Dal rilievo al confronto*. Florence, 1989: p.173.

Strozzi palaces are the biggest private palaces of “Quattrocento” Florence, with ground floor areas of 1.600 and 2.200 square meters respectively.<sup>3</sup> However, the 15th century Palazzo Pitti is certainly one of them too, even with a much smaller ground floor area (c. 800 m<sup>2</sup>) which is comparable to the minor palaces. What distinguishes the Pitti as monumental is its formidable height (35 m, compared with 24 m for the Medici and 32 m for the Strozzi, all for three floors), its setting and the quality and cost of the materials and craftsmanship employed in its construction. Average Florentine palaces generally have less than 1000 m<sup>2</sup> for their ground floor area. The following table provides some examples of Florentine palaces:

*TABLE 1 - Examples of 15th century Florentine palaces:*

Palace:	Date started:	Architect:	Area:	Height:
Medici	1444	Michelozzo	1.560 m <sup>2</sup>	24.00 m
Pitti	1458	unknown	772 m <sup>2</sup> *	35.38 m
Strozzi	1489	G. Sangallo**	2.114 m <sup>2</sup>	32.00 m
Rucellai	before 1446	Alberti (facade)	875 m <sup>2</sup>	21.08 m
Pazzi	1458	unknown	944 m <sup>2</sup>	22.34 m
Boni	1461	unknown	922 m <sup>2</sup>	22.42 m
Corsi-Horne	c. 1489	G. Sangallo**	354 m <sup>2</sup>	19.50 m
Gondi	c. 1490	G. Sangallo	900 m <sup>2</sup>	24.36 m

\*corresponds to length of seven bays and width of sala plus walls / \*\*attribution

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<sup>3</sup>All ground floor areas provided in this work are approximate, based on various sources indicated in the illustrations and quoted in the bibliographic section.

Ground floor area alone can be a deceiving criterion sometimes: the palace that Giuliano da Sangallo designed for Bartolomeo Scala (started c. 1472) would be among the largest minor palaces in Florence (ground floor area: 1.100 m<sup>2</sup>), but it has only two floors while all others have three. Moreover, the palace was built in a suburban area of Florence and the materials used were much less expensive than usual (for instance, the courtyard decoration was executed in stucco rather than stone). The economic standing of the patron is another useful reference to classify a palace, but there are exceptions: Giovanni Rucellai was one of the richest citizens of 15th century Florence, but his new house is relatively small (less than 900 m<sup>2</sup>) and except for the facade, unpretentious. On the other hand, the banker Giovanni Boni, who started an impressive new palace for his family by 1461 (today, the Palazzo Boni-Antinori) and died ten years later, left his family bankrupted, forcing the heirs to sell the house. The same thing happened with Montano Barbarano, a client of Palladio in 16th century Vicenza.

Compared to Florence, 15th century Rome presents a different picture. If the economy in Florence was based on a dynamic private sector, Rome's asset was the presence of the pope and the church institutions. By the middle of the century, coinciding with the efforts to restore the urban image of Rome by popes such as Nicholas V and Sixtus IV, some rich cardinals started to built large palaces in the city. The list includes the Palazzo Barbo (later Venezia, begun 1455; 5.000 m<sup>2</sup> including church), Palazzo Sforza-Cesarini (later Cancelleria Vecchia, begun 1458; 2.200 m<sup>2</sup>), Palazzo Nardini (later Governo Vecchio, begun 1473; 2.100 m<sup>2</sup>), Palazzo Girolamo Riario (later Altemps, begun 1476; 2.600 m<sup>2</sup>), Palazzo Domenico della Rovere (later dei Penitenzieri, begun 1478), Palazzo Girolamo della Rovere ai Santi Apostoli (begun c. 1480), Palazzo Riario (later della Cancelleria, begun 1485; 5.600 m<sup>2</sup> including church). Apart from their

monumental dimensions, a few less evident traits distinguished these palaces from common residential construction: a tendency to unify all parts of the building in a single volume, more regular distribution of openings, substitution of medieval “bifore” by rectangular crossed windows and the presence of a central courtyard with a multi-story portico on one or more sides.<sup>4</sup> The last of these 15th century great cardinal residences was built by Raffaele Riario (and later renamed Palazzo della Cancelleria) and it introduced fundamental innovations in Roman palace architecture. The systematic arrangement of the Florentine plan, with an androne leading to a rectangular courtyard encircled by loggias through which the staircase is reached (as in the Palazzo Medici, *fig. 1*), and the theme of the classical facade (as defined in the Palazzo Rucellai) are reinterpreted here in Roman terms, creating a building which became very influential in posterior developments in palace architecture.<sup>5</sup>

In contrast with the 15th century, few large private palaces were built in Rome during the first half of the 16th century. The first one is the palace built for cardinal Adriano Castellesi (later Giraud-Torlonia; *fig. 3*) whose plan and courtyard were designed by Bramante, while the largest one is the Palazzo Farnese, designed by Antonio da Sangallo the Younger for cardinal Alessandro Farnese (started 1514-15; *fig. 53*). This short list includes the Palazzo Fieschi-Sora (enlarged c. 1510 by the Fieschi, lords of Lavagna; 1.500 m<sup>2</sup>) and the monumental projects for Leo's X palace in Piazza Navona, first by Giuliano da Sangallo (1513) and then by his nephew Antonio the Younger (1514-15). The construction of large palaces in

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<sup>4</sup>See Magnusson, Torgil. *Studies in Roman Quattrocento architecture*. Stockholm, 1958: pp. 341-349.

<sup>5</sup>See Frommell, Christoph. “Il palazzo della Cancelleria” in Valtieri, S. (ed.). *Il palazzo dal Rinascimento a oggi*. Roma, 1989: pp. 29-54; and Valtieri, Simonetta. *Il palazzo del principe, il palazzo del cardinale, il palazzo del mercante nel Rinascimento*. Roma, 1988.

Rome will regain momentum by the middle of the century with works such as the Palazzo Spada (begun 1549), the Palazzo Borghese (begun 1560), the Palazzo Quirinale (begun 1577), and the Palazzo Laterano (begun 1586). However, the little number of large palaces built in early 16th century Rome is compensated by the great number of minor palaces which were built there in the same period (see table n. 2).

### **Minor palaces in early 16th century Rome**

The programs of restoration carried in Rome by the papacy since mid-15th century succeeded in revitalizing the city. In the beginning of the 16th century, a new class of merchants and professional men appears in Rome, mostly connected to the growing importance of the papal bureaucracy.<sup>6</sup> This lesser nobility was composed by doctors, professors, diplomats, secretaries, philosophers, lawyers and artists, but also included some bishops and cardinals of smaller income, and a certain number of businessmen (connected to banking, agriculture and trade) helping to run the Papal States. Most of these papal officers had a humanist education, and they saw their houses both as a safe investment of their profits obtained at the papal court and as part of a process of social affirmation.<sup>7</sup> The Rome of Julius II and Leo X provided the scene for the appearance of minor palaces as a frequent commission for architects, when previous legislation promoting private building was combined with favorable economic conditions in Rome. The “market” thus created by a constant demand for urban residences set

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<sup>6</sup> See Burke, Peter. *Culture and society in Renaissance Italy. 1420-1540*. New York, 1972: pp. 207-265; on conditions in Rome in early 16th century, see Partner, Peter. *Renaissance Rome. 1500-1559. A portrait of a society*. Berkeley, 1976.

<sup>7</sup> Partner, 1976: p. 163.

the context for the appearance of the professional architect and the private “client” rather than patron. After Bramante’s plan for the large Palazzo Castellesi (c. 1500; *fig. 3*) and his design for the Palazzo Caprini (1504-5), the minor palace type established itself in Rome through a series of buildings designed by well-known architects for the new class of clients, such as the palazzi Della Valle (1508), Gerolamo Pichi (before 1510), Medici-Lante (1514), Baldassini (1514-15), Alberini (1515), Jacopo da Brescia (1516), Viacampes (1518), Branconio dell’Aquila (1518), Gaddi (1518), Maccarani (1520), Casa di Raffaello (1520), Fusconi (1520), Ossoli (1520), Le Roy (1523), Vidoni-Caffarelli (1524), Ferrari-Del Pozzo (1526), Vescovo di Cervia (1526), Angelo Massimo (1533), Pietro Massimo (or Massimo alle Colonne; 1533), Casa Sangallo (1534) and Palazzo Sangallo (1542-45). Apart from building minor palaces in Rome, architects such as Antonio the Younger, his uncle Antonio da Sangallo the Elder, Raphael, Peruzzi, Sanmicheli and Giulio Romano also brought this type of building to other areas such as Montepulciano, Fermo, Orvieto, Siena, Florence, Mantua and Verona. Finally, Palladio designed and built many minor palaces for the Vicentine nobility and also for other clients in different parts of the Venetian Terraferma.

In Northern Italy, Sanmicheli and Palladio include both large and minor palaces in their practice. Sanmicheli built the large residence for cardinal Ludovico Canossa and started another for the Bevilacqua family, while he also designed a minor palace for the brothers Nicolo and Giovan Francesco Lavezola (today’s Palazzo Pompei) and the even smaller palazzi Honorij (Verona) and Roncalli (Rovigo). Palladio also designed large palaces (Thiene, Porto, Valmarana) and minor ones (Antonini, Pisani, Capra, Barbaran).



### Features of minor palaces

Contrary to the large palaces for cardinals or very rich businessmen, minor palaces in 16th century Rome are generally located in smaller plots, their average ground floor area ranging from 500 to 1.000 m<sup>2</sup> (compared with areas between 4.000 and 5.000 m<sup>2</sup> in the palazzi Venezia, Cancelleria and Farnese; see table 2). In Northern Italy, the differences in size are not as great as in Rome, but they do exist (see tables 3 and 4).

The vertical development of a minor palace presents two main floors and an attic or smaller third storey, with mezzanines over some parts of the first two floors and a basement. Large palaces in late 15th and early 16th century Rome have three main floors. Minor palace heights generally range from 16 to 22 meters, while the larger palazzi Venezia and Cancelleria reach about 25 m, and the Palazzo Farnese is 29 m high. One can see that height and number of floors are not as relevant as the total ground floor area in contrasting larger and minor palaces.

The geometry of minor palace plots is frequently irregular, creating an additional difficulty for the designer. Moreover, most plots were surrounded by built areas, generally having only one narrow side facing the street. Serlio was the first architectural writer to address this design problem systematically, which occupies a good part of his Seventh Book.<sup>8</sup> Written before 1555, the book provides many examples of urban residences and particularly interesting are eight cases of palaces for plots “fuori di squadra,” in which plans according to Renaissance design principles (symmetry, axial orientation, proportional relations, sequential disposition of rooms) are accommodated on irregular plots. Serlio

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<sup>8</sup>Sebastiano Serlio. *Il Settimo Libro dell'Architettura*, in *I Sette libri dell'Architettura*. Venice, 1584 (facsimile: Bologna, 1987).

presents eight solutions for fictitious sites as examples for his readers (*figs. 6, 7*). Palladio and Scamozzi also dealt with the problem of the palace plan for an irregular plot (*fig. 119*).<sup>9</sup>

Such design problems associated with the increasing complexity of functional and ceremonial requirements for a palace in the 16th century defined a specialized field for architects and also established the drawing of the plan as the basic instrument in designing a house. Numerous extant drawings by Sangallo the Younger, Peruzzi and Palladio give evidence to the primary role of the plan sketch as a speculative and creative tool to design a small palace. Remarkably, very few studies have approached this fundamental aspect of an emerging practice of architecture in the 16th century.<sup>10</sup>

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<sup>9</sup>Palladio, Andrea. *I Quattro Libri dell'Architettura*. Venice, 1570 (facsimile: Milan, 1980); English translation: Tavernor, R. & Schofield, R. (translators). *The four books on architecture*. Cambridge, 1997; Scamozzi, Vincenzo. *L'Idea della Architettura Universale*. Venice, 1615 (facsimile: Ridgewood, 1964).

<sup>10</sup>Gustavo Giovannoni (*Antonio da Sangallo il Giovane*, Roma, 1959: pp. 38, 39) was probably one of the first to warn against an exclusively aesthetic vision of architecture which misses its basic character in considering it as a purely visual art. Giovannoni contrasts artist and architect in stating that the second "first studies the plan of the building in relation to internal distribution of functions and the requirements of solid construction, and after studies the street and courtyard elevations and the form and decoration of rooms . . ." More recently, Patricia Waddy's *Seventeenth-Century Roman palaces: use and the art of the plan* (New York, 1990) has stressed the importance of the palace plan in the design of Roman Baroque palaces.

TABLE 2: *Examples of late 15th and 16th century Roman palaces*

Palace:	Started:	Architect:	Area (gr. fl.):	H(m):
<b>Cancelleria</b>	c. 1485	unknown	5.600 m2	24.67
<b>Castellesi</b>	c. 1500	D. Bramante (plan)	1.450 m2	19.50
<b>Fieschi-Sora</b>	c. 1500	D. Bramante	1.500 m2	23.14
<b>Farnese</b>	c. 1515	A. Sangallo	4.400 m2	29
<b>Baldassini</b>	1514-16	A. Sangallo	900 m2	18.38
<b>Gaddi</b>	1518	J. Sansovino	1.000 m2	19.39
<b>Ossoli</b>	1520	B. Peruzzi (attr.)	390 m2	16.80
<b>P. Massimo</b>	1533	B. Peruzzi	730 m2	20.61
<b>A. Massimo</b>	1533	G. Mangone	590 m2	19
<b>Casa Sangallo</b>	1534	A. Sangallo	520 m2	15.63

The different ground floor areas in tables n. 2, 3 and 4 show that in three different Italian cities (Rome, Verona and Vicenza) large and smaller palaces were being built in the 16th century. Differences are very clear in Rome (table n. 2), where the larger cardinal palaces (Cancelleria, Farnese) are far bigger than the minor palaces of the lesser nobility (Baldassini, Gaddi, Ossoli). However, certain palaces appear to create an intermediate category, such as the Palazzo Castellesi and Palazzo Fieschi-Sora. In Northern Italy, the same distinction is perceived in the work of Michele Sanmicheli in Verona and Venice. His large urban houses include the Palazzo Canossa in Verona and the palazzi Corner and Grimani in Venice. These houses are much larger than the palazzi Honorij (Verona) and Roncalli (Rovigo), built with open arcades on the ground floor. The Palazzo

Pompei-Lavezola (Verona) defines an intermediate case between large and smaller palaces.

*TABLE 3 - Sanmicheli's palaces in Northern Italy*

Palace:	Started:	Area (gr. fl.):	Height:
Canossa (Verona)	c. 1530	1.620 m <sup>2</sup>	17.00 m
Grimani (Venice)	c. 1557	1.680 m <sup>2</sup>	27.00 m
Corner (Venice)	c. 1555	1.050 m <sup>2</sup>	26.00 m
Pompei (Verona)	c. 1530	780 m <sup>2</sup>	14.80 m
Honorij (Verona)	1555	500 m <sup>2</sup>	16.12 m
Roncalli (Rovigo)	1555	450 m <sup>2</sup>	14.70 m

In Vicenza, Palladio received commissions of large and smaller palaces, too (see table 4). However, the problem of size there acquired a different dimension. Palladio's large palaces all became frustrated enterprises: some were never started and all others were left incomplete, as impressive fragments of very ambitious enterprises. Smaller palaces more frequently reached completion (Civena, Antonini, Schio, Pisani), but sometimes they took a long time to be finished (Chiericati) or were finished in a different form (Barbarano). Some large palaces were partially built originating minor palaces: this is the case with the palazzi Porto-Festa and Valmarana, of which only the front part was completed. Palladio's original plans for the palazzi Thiene, Porto, Angarano and Valmarana are large compositions, contrasting with smaller palaces mentioned above. Palladio's palaces for Girolamo Chiericati, Giulio Capra and Montano Barbarano (initial project) can

be placed in an intermediate category, being impressive in appearance but acknowledging limitations of site and size in their planning.

*TABLE 4 - Palladio's palaces (based on projects in the Quattro Libri):*

Palace:	Date:	Area (gr. fl.):	Height:
Thiene (Vicenza)	1542/46	3.300 m <sup>2</sup>	19.12 m
Angarano (Vicenza)	1551/55	2.600 m <sup>2</sup>	17.30 m
Valmarana (Vicenza)	1554	2.600 m <sup>2</sup>	17.50 m
Porto-Festa (Vicenza)	1547/49	1.800 m <sup>2</sup>	20.20 m
Capra (Vicenza)	1563/64	1.000 m <sup>2</sup>	17.00 m
Chiericati (Vicenza)	1548/49	1.000 m <sup>2</sup>	19.00 m
Antonini (Udine)	1552/56	760 m <sup>2</sup>	16.65 m
Barbarano (Vicenza)	1570	750 m <sup>2</sup>	17.70 m
Garzadori (Vicenza)	1555/56	610 m <sup>2</sup>	16.40 m
Pisani (Montagnana)	1552/53	545 m <sup>2</sup>	15.90 m
Civena (Vicenza)*	1539/40	490 m <sup>2</sup>	14.50 m

\*data from Bertotti-Scamozzi

The data presented on palaces in three Italian cities (Rome, Verona, Vicenza) shows that architects designed palaces of various sizes for different clients. The tables present only the dimensional aspect of the problem. Such variety of size does not permit a rigid classification of palaces according to area alone. The example of the palazzi Scala and Pitti was already mentioned (pages 8, 9). Despite having a larger ground floor than average palaces in Florence, its suburban location, cheap materials for decoration and lack of a third floor definitely exclude it from the category of larger palaces, while the mid-15th century

Palazzo Pitti is clearly a large one, even with a smaller ground floor area, due to its location, decoration and height (35 m), which makes it one of the highest palaces of the Italian Renaissance. Averaging 12 m of height, its floors comprise a volume of space which is much bigger than the Palazzo Scala. Therefore, the definition of a minor palace has to consider other factors and be flexible enough to be used in a case-by-case basis.

One of the main features of a minor palace is that its plan is a reduced version of the arrangement of larger palaces. Arnaldo Bruschi traces the origins of the Roman 16th century palace plan to Bramante's plan for the Palazzo Castellesi (1499-1503; *figs. 3-5*), which in turn is connected to Michelozzo's plan for the Palazzo Medici in Florence (1444-59; *figs. 1, 2*).<sup>11</sup> Such connection is seen in terms of the plan's general arrangement, in the articulation of the spatial sequence and into/ courtyard loggia/staircase and in the function of the rectangular courtyard as the centralizer element of the whole plan. These features were first applied to a minor palace commission in Antonio da Sangallo the Younger's plan for the Palazzo Baldassini, started in 1514-16 in Rome (*fig. 9*). In fact, in a minor palace the ground floor comprises two different sections: a ceremonial entrance (atrium or androne, courtyard loggia, main staircase) and a service area with kitchen, storage rooms, small dining hall, latrines and sometimes a bathroom. The front rooms besides the vestibule might be used for shops to be rented out, but when the means

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<sup>11</sup>Bruschi, Arnaldo. "Baldassare Peruzzi nel palazzo di Francesco Fusconi da Norcia" in *Architettura, Storia I Documenti* n.2 (1986): 11-30.

of the owner permitted, they served as space for business, audience halls, summer rooms, guests' quarters or even for the display of works of art.<sup>12</sup>

In Rome, the piano nobile followed the 15th century Florentine system of "sala-camera" which was later developed into the "appartamento": the "sala" was the biggest room in the house, serving for ceremonies, banquets, receptions, dancing and other social events, while the "camera" was the owners' bedroom, which could have a number of other smaller spaces connected to it, like an "anticamera," a studio and other "camere."<sup>13</sup> Ceremonial circulation on the piano nobile progressed from the sala to the more private quarters of the house, but this was probably less formalized in a minor palace. Family members and servants had a more flexible way of moving around the house. Corridors were not common at that time, and the few existing ones were mostly used by servants and never by visitors. Family members and visitors moved from room to room, while servants used the service stairways which connected vertically the service areas below, the piano nobile in the middle and the servant's quarters above.

It is interesting to notice that very few piano nobile plans of early 16th century palaces have survived (Raphael's design for his own house in Via Giulia being one of the remarkable exceptions; *fig. 8*). One possible explanation is related to the role of the ground floor plan in defining the structure of the whole building. As the main walls of the palace were continued from foundations to the top, their

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<sup>12</sup>Information on the arrangement of each floor of cardinal palaces in early 16th century Rome can be obtained in Cortesi's treatise *De Cardinalatu*. See Cortesi, Paolo. "On the cardinal's palace" (transl. by d'Amico and Weil-Garris) in *Studies in Italian Art and Architecture-15th to 18th century*. Rome, 1980: pp. 78-81.

<sup>13</sup>On the "appartamento" and the arrangement of the palace plan, see Waddy, Patricia. *Seventeenth-Century Roman palaces. Use and the art of the plan*. New York, 1990: pp. 3-13; and Thornton, Peter. *The Italian Renaissance interior. 1400-1600*. London, 1991: pp. 284-320.

disposition below was decided with the arrangement of the floors above already in mind. This is shown in architects' drawings, where the sala above is frequently indicated with crossed lines on the ground floor plan and its dimensions are provided. If the sala was aligned to the street facade, then there would be at least three longitudinal walls continued from ground level to the piano nobile: one on each extreme of the plot and one of the androne's walls. The bigger space resulting from this subdivision was to be the sala. This is what occurs in minor palaces such as the Baldassini, Leroy, Sangallo, Ossoli, Angelo Massimo and in Raphael's house. When a longitudinal sala is used, there should be four main walls defining three major subdivisions in depth, which occurs in the Palazzo Pietro Massimo and most of the palaces in the Veneto.

The system of the Roman "appartamento" is not used in palaces in Northern Italy, where other traditions defined a different arrangement of the plan. Most of Palladio's palace plans were developed from that tradition, which basically presents a large entrance hall with a row of smaller rooms on each side of the ground floor. The same scheme is repeated on the piano nobile, where the sala occupies the center and the family quarters are on the two sides. In the 15th and early 16th century, minor palaces in the Veneto generally have only one row of rooms besides the long hall.

Apart from drawings of plans, most of the original drawings of 16th century palaces are facade and courtyard elevations and details of specific parts (columns, loggias, staircases, etc.). Concerning sections, the spatial simplicity of a palace, whose design is basically a horizontal sequence of rooms on fixed levels, may explain the almost absolute lack of them.



### Similarities and differences between minor and larger palaces

If minor palaces are reduced and simplified versions of larger ones, what is taken and what is left by architects in their planning? The ceremonial spaces are obviously bigger in large palaces. The sala, the most important room of the piano nobile, was generally located facing the street and very close to the main staircase landing on the piano nobile. The following table shows comparative dimensions of “sale” in four large palaces (Cancelleria, Farnese, Castellesi and Canossa) and six small ones:

TABLE 5 - Piano nobile and sala in Italian Renaissance palaces:

Palazzo	P. nobile (A)	Sala ( dim. )	Ratio	Sala (A)	Sala(h)
Cancelleria (Rome)	4.940 m <sup>2</sup> *	27 x 16 m	1/11.4	432 m <sup>2</sup>	12 m**
Farnese (Rome)	3.670 m <sup>2</sup>	20.5 x 14.3 m	1/12.4	295 m <sup>2</sup>	19 m**
Castellesi (Rome)	1.210 m <sup>2</sup>	21.7 x 10.5 m	1/5.3	227 m <sup>2</sup>	6.50 m
Baldassini (Rome)	800 m <sup>2</sup>	14 x 8 m	1/7.1	112 m <sup>2</sup>	5.70 m
A. Massimo (Rome)	470 m <sup>2</sup>	12.8 x 7.7 m	1/4.8	98 m <sup>2</sup>	7.20 m
P. Massimo (Rome)	635 m <sup>2</sup>	13.3 x 9.4 m	1/5	125 m <sup>2</sup>	8.40 m
Lavezola (Verona)	780 m <sup>2</sup>	17.5 x 7.8 m	1/5.8	134 m <sup>2</sup>	5.80 m
Canossa (Verona)	1.330 m <sup>2</sup>	18.1 x 12 m	1/6.1	218 m <sup>2</sup>	8.07 m
Barbaran (Vicenza)+	650 m <sup>2</sup>	14.5 x 8.9 m	1/5	130 m <sup>2</sup>	9.20 m
Porto (Vicenza)++	740 m <sup>2</sup>	14.1 x 10.6 m	1/5	150 m <sup>2</sup>	10.6 m

\*Includes church / \*\*Comprises two floors/ +From *Quattro Libri* / ++As built

The table shows that in minor palaces, the sala generally comprises 1/5 to 1/6 of the total area of the piano nobile. Even more similar are the sizes of these halls, despite differences in the total area of the floor: their average area ranges

from 100 to 130 m<sup>2</sup>. The ratio sala/piano nobile is significantly different in Roman large palaces, where the size of the sala represents a smaller proportion of the total floor area. It should be noticed, however, that most large palaces have more than one sala. Moreover, in order to keep good proportional ratios, a very large sala usually comprises two storeys in height (as in the palazzi Venezia, della Cancelleria and Farnese). In this cases, the mere comparison of ratios loses much of its significance.

In minor palaces, the sala is limited to the full height of the piano nobile, while other rooms on this level usually have mezzanines above. The higher the standing of the owner, the bigger had to be the size of the sala, in order to cope with the greater number of guests in social events and more complex ceremonial requirements. This explains the different dimensions of “sala” in large and minor palaces. Minor palace owners reflect their simpler ceremonial requirements in the smaller size of their sala.

Courtyard dimensions are not defined by capacity of people as the sala. The practical function of courtyards is to provide light and ventilation to the core of the palace. However, in 16th century Rome, they became an important part of the residence, receiving as much attention as the sala in terms of proportions and decoration.<sup>14</sup> Courtyards are monumental in large palaces (generally with loggias on the four sides) and simplified in smaller palaces. Roman minor palaces usually have a central courtyard with one or two loggias, while the other sides mirror the articulation of the loggias with classical relief. Such procedure is a reduction of the peristyles found in large palaces like the Medici (Florence), Cancelleria and

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<sup>14</sup>This is probably related to the increasing interest in Vitruvius in the early 16th century. Vitruvius describes five different types of “cavaedium” (book VI, chapter III) which were interpreted by Renaissance architects as the courtyard of a house (see Pellecchia, 1992).

Castellesi (both in Rome; *figs. 1-5*). Its first important example is the Palazzo Baldassini, started between 1514-16 in Rome (see *figs. 9, 31, 33-36*).

*TABLE 6 - Ground floor and courtyard in Italian Renaissance palaces:*

Palace:	G. floor area:	Court area:	Ratio:	Loggias:
Cancelleria (Rome)	5.600 m <sup>2</sup> *	660 m <sup>2</sup>	1/8.5	on 4 sides
Farnese (Rome)	4.400 m <sup>2</sup>	729 m <sup>2</sup>	1/6	on 4 sides
Castellesi (Rome)	1.450 m <sup>2</sup>	240 m <sup>2</sup>	1/6	on 4 sides
Baldassini (Rome)	900 m <sup>2</sup>	100 m <sup>2</sup>	1/9	on 1 side
A. Massimo (Rome)	590 m <sup>2</sup>	123 m <sup>2</sup>	1/5	on 2 sides
P. Massimo (Rome)	730 m <sup>2</sup>	97 m <sup>2</sup>	1/7.5	on 2 sides
Pompei (Verona)	780 m <sup>2</sup>	112 m <sup>2</sup>	1/7	on 4 sides**
Canossa (Verona)	1.620 m <sup>2</sup>	288 m <sup>2</sup>	1/5.6	on 1 side
Barbarano (Vicenza)	750 m <sup>2</sup>	103 m <sup>2</sup>	1/7.3	on 1 side
Valmarana (Vicenza)+	1.500 m <sup>2</sup>	295 m <sup>2</sup>	1/5	on 2 sides

\*Includes church / \*\*independent porticoes (not continuous loggias) / +excludes garden, stables

Apart from dimensional differences of parts, larger and minor palaces also differ in the number of parts. In large palaces, the “appartamento” comprises a great number of rooms in a linear sequence, from the main reception areas to the private quarters of the owner. Although early versions of a similar arrangement appear in Florence (Palazzo Medici), its development should be credited to the planning of cardinal palaces in 15th century Rome, in which ceremonial requirements became very sophisticated.<sup>15</sup> In the Palazzo della Cancelleria, six

<sup>15</sup> See note n. 13.

rooms precede the patron's most private quarters (bedroom, bathroom and studio), including two monumental "sale" and a chapel. The Palazzo Venezia has five large rooms placed in sequence before the most private area, and the same number is found in the Palazzo Farnese. In the Palazzo Castellesi, four rooms precede the cardinal's private quarters, including a sala and a salotto. These rooms between the sala and the bedroom could serve as private dining-parlors for the owner's great privacy, as private audience rooms and as antechambers before the main bedroom (*fig. 5*). On the other hand, in the Palazzo Baldassini the sala is directly linked to the owner's main bedroom, while in the Palazzo Angelo Massimo there is only one "anticamera" between the sala and the main bedroom (*fig. 10, 31*). In Florence, even large palaces such as the Medici and the Strozzi (designed for secular families) have only two rooms (sala, anticamera) before the private quarters of the owners (*fig. 2*). The sequence of spaces in the Roman palace usually ended with a set of small rooms connected to the owner's bedroom, which might comprise a studio, a bathroom and a "guardaroba." Secular patrons would need a smaller number of reception rooms than cardinals and princes, but would also require rooms for his wife and their children in his palace, a concern not shared by cardinals. However, ceremonial needs, space for numerous guests and the luxury of having different apartments for summer and winter established the great difference between large cardinal palaces and their smaller counterparts.

It was already mentioned that the "appartamento" is a typical Roman concept. In Northern Italy, the sala was a longitudinal space in the middle of the piano nobile into which all rooms opened, making a sequential arrangement impossible. Minor palaces in early 16th century Veneto generally present a simplified arrangement (with only one row of rooms besides the sala), generating an asymmetric facade. Palladio reinterpreted the palace traditions of the Veneto in

creating his entrance hall with four columns as the central feature of a symmetric scheme, both for larger and minor palaces.<sup>16</sup>

With limited means to build, the average owner of a minor palace could not afford the privileges of independent apartments for summer and winter or to reserve ample space in the building for guests. Moreover, the smaller staff required to run a minor palace resulted in less space used for their quarters. In early 16th century, the “famiglia” of cardinal Farnese amounted to about 300 persons, and rich cardinals use to have at least 200 servants and providers in their residences,<sup>17</sup> but the operation of a minor palace required much fewer people. The life of the Roman lesser nobility was more simple and less ceremonial compared to cardinals. Moreover, businessmen and civil servants hardly could afford the expenditure of cardinals, or were not willing to do so. According to Goldthwaite, there were only ten servants working at the monumental Palazzo Strozzi in mid-16th century Florence, and the average number in smaller palaces in that city was two or three servants.<sup>18</sup> But in special events, a greater number of servants would be hired.

Service and storage areas were usually located on the ground floor and in the basement. The same happened with latrines and bathrooms, as the water-source generally entered the palace at ground level, and it was difficult to get water lifted to the upper floors. The dimensions of these parts are not the same in all palaces: the large ones required larger kitchens and sometimes even more than one (there is

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<sup>16</sup>Concerning 15th and early 16th palace architecture in Venice, see McAndrew, John. *Venetian architecture of the Early Renaissance*. Cambridge, 1980. On palaces in the Venetian “Terraferma,” see Cevese, Renato. “Dal gotico al primo Rinascimento in palazzi di Padova e di Vicenza” in *Annali di architettura* n. 2, 1990: pp. 83-96.

<sup>17</sup>Waddy, 1991: p. 33. Many of these servants did not live in the palace.

<sup>18</sup>Goldthwaite, Richard. “The Florentine palace as domestic architecture” in *American Historical Review* n.77, 1972: p. 1009.

one per floor in the Palazzo Piccolomini in Pienza). They also require larger storage areas, a greater number of stalls, and numerous latrines and a large dining hall for the servants. In minor palaces the requirements were simpler, demanding fewer and smaller rooms.

### The minor palace and the “casa”

In Renaissance Rome, a minor palace can also be defined in contrast with the more humble “casa.” The Roman “casa” here presented is not the “casa a schiera” or row house which was the humblest and most common type of house in Rome (see *fig. 12*). The “casa” that is comparable to minor palaces was owned by people with certain means (usually papal civil servants, merchants and famous artisans). Therefore, the clientele for both kinds of buildings was similar. Such type of “casa” was distinguished from the common urban house by its facade decoration and/or size.<sup>19</sup> Two main distinctions between “case” and minor palaces can be pointed out, concerning facades and courtyards. Sixteenth century minor palaces in Italy generally have a facade five or seven bays wide with a centralized entrance, while the smaller “casa” usually presents two or three bays in its facade with a decentralized access (like the case Sander, Roselli and Prospero Mochi built in early 16th century Rome; *figs. 13, 14*).<sup>20</sup> Facades of “case” are generally plain,

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<sup>19</sup>Tomei defines two kinds of “casa” in Rome: one is the “casa dalla borghesia”, being simple and generally small but revealing the hand of the architect in its aspect; the second is the “casa popolari,” described as “senza forma architettonica.” See Tomei, Piero. *L'Architettura a Roma nel quattrocento*. Rome, 1942: p. 255.

<sup>20</sup>See Benedetti, S. and Zander, G. *L'arte in Roma nel secolo XVI*. Bologna, 1990: 95-97. Concerning the “casa” and “palazzo” in 15th and 16th century Rome, see Golzio, V. and Zander, G. *L'arte in Roma nel secolo XV*. Bologna, 1968: pp.79-129; and Broise, Henri. “Les maisons d’habitation à Rome aux XV et XVI siècles: les leçons de la documentation graphique” in Vigueur, J.-C. M. (ed.). *D’une ville à l’autre: structures matérielles et le organisation de l’espace dans les villes Européennes (XIII-XVI siècle)*. Rome, 1989: pp. 609-629.

covered with stucco and painted, and sometimes decorated with “sgraffito.” Openings may be aligned, but the facade articulation is rarely symmetric as in minor palaces (Sangallo’s Casa Ferrari is one of the few exceptions). Narrow facades of “case” are sometimes decorated with a classical portal and trabeated/arched windows in stone (see *figs. 13, 14*). Rather than a regular classical courtyard, the “casa” normally presents a small light well placed in the middle of the building besides the androne (as in Sangallo’s Casa Ferrari; *fig. 15*) or a few smaller light wells irregularly distributed (*figs. 17*). In some houses, the loggia after the androne defines the end of the building (*figs. 16*). These differences are generally related to the smaller dimensions of the plot. Therefore, in comparison with minor palaces, the plan of the “casa” is more “informal,” flexible to adaptations to narrow and irregular plots and less explicitly inspired in the axial and symmetrical arrangement of larger palaces (see plans in *figs. 15, 17*).

### Minor palaces and shops

Frequently, shops are located on the ground floor of a minor palace, providing additional income for the owner. It is commonly assumed that patrons thought that shops gave a less distinctive impression to the facade and so, whenever possible, they should be avoided.<sup>21</sup> However, certain facts seem to suggest an alternative view. In proposing a large palace for a busy street, Serlio explains in his Seventh Book that “per essere questo luogo molto nobile, è necessario di farci delle botteghe, le quali sonno grande ornamento della città &

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<sup>21</sup>See Goldthwaite, Richard. “The building of the Strozzi palace: the construction industry in Renaissance Florence” in *Studies in Medieval and Renaissance History*. vol. X, 1973: p. 111. In fact, most 15th century palaces in Florence have no shops, both larger (Medici, Pitti, Strozzi) and minor ones (Boni-Antinori, Pazzi, Rucellai, Corsi-Horne, Gondi).

rendono utile al padrone della casa.”<sup>22</sup> The monumental palace built by cardinal Raffaele Riario (later Palazzo della Cancelleria) included a row of shops facing the via del Pellegrino. Despite being included due to an agreement (Riario took over the area but rebuilt the shops previously existent<sup>23</sup>) and placed far from the main facade, their presence reveals that they were not so threatening to the beauty of a large palace in the eyes of the patron.

The presence of shops could be important to defray the costs of construction for a patron with limited means and this was the case with the minor palaces attributed to Raphael in Rome.<sup>24</sup> In the Palazzo Pichi (started before 1510 in Rome; *fig. 18*), the use of the ground floor for shops was maximized (the original plan presents more than 20), and Sangallo’s design for the Vescovo di Cervia (U 709; *fig. 51*) employs the same strategy, having 18 shops. Sangallo’s palace on the via Giulia (started c. 1542; later enlarged and renamed Palazzo Sacchetti) had 14 shops in the original project (*fig. 42*). In these projects, architects and clients clearly took advantage of the commercial potential of the sites. However, the presence of “botteghe” is not a precise feature to identify a small palace. In fact, many of them didn’t have any shops (palazzi Baldassini, Ossoli, Le Roy, Pietro Massimo, Angelo Massimo). Concerning Venetian architecture in the 16th century, shops are rare in the palaces designed by Sanmicheli, Sansovino and Palladio.

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<sup>22</sup>Serlio, Book VII, 1575: p. 58

<sup>23</sup>See Valtieri, 1988: p. 38.

<sup>24</sup>See articles on Raphael’s palaces in Frommel, C., Ray, S. and Tafuri, M. *Raffaello architetto*. Milan, 1984.



### Minor palaces in treatise literature

Renaissance treatises also deal with the problem of different categories of palaces. Francesco di Giorgio's treatises<sup>25</sup> were written between 1470 and 1490. In the "Secondo Trattato," he introduces five different categories of private houses (fig. 19). The first one is the agricultural villa, while the other four are located in the city. The humblest urban kind is the house of the craftsman (with a shop below and family quarters above), followed by the house of the merchant (with a larger shop, storage areas and rooms for guests on the ground floor). The fourth category is the house of the "studianti" (doctors, lawyers, notaries, procurators) which has rooms for their professional activities on the ground floor while other floors are similar to the following level of houses in the treatise (the house for the noble). The house of the "studianti" is the first residence "dove se mettarà le semetrie delle stanze e parti delle case."<sup>26</sup> The last and highest level (as princely houses are treated separately) is the house of the noble, described in much more detail. This is the only kind to be called "palazzo" by the author, comprising "molte parti più que le altre" which he describes one by one (atrio, cortile, cisterns, rooms, salotti, gardens, etc.). The articulation of the plan is not explained, as the focus is on the proportions of each room, but the author provides many schemes of plans as illustrations. Francesco di Giorgio's five classes of houses are the first attempt to systematize urban residential architecture in Renaissance Italy and his categories provide the first important references for a definition of minor palaces. His "palazzo" for the noble is probably correspondent to the large palaces built by rich businessmen or important cardinals, while the house for the "studianti,"

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<sup>25</sup>Martini, Francesco di Giorgio. *Trattati di Architettura, Ingegneria e Arte Militare* (ed. C. Maltese). Milan, 1967 (2 vols.).

<sup>26</sup>Martini (Maltese ed.), 1967: p. 344.

planned according to symmetry and having something of the arrangement of the “palazzi,” might be associated to minor palaces.

Sebastiano Serlio deals with the subject of the urban residence in his Sixth and Seventh books. The first survived in manuscript form and the second went to press only in 1575 in Germany, two decades after the author’s death. However, these books illustrate how architectural literature was progressively incorporating themes related to the planning of minor urban residences to its scope. In his Sixth book, Serlio presents a catalog of urban houses subdivided in seven different social categories, ranging from the “poor craftsman” to the “casa del gentilhuomo nobile dentro della città.”<sup>27</sup> Each house is described in the text and illustrated in ground floor plan and facade, always with two versions: in the Italian and in the French manner. Serlio’s first categories of houses are regularized versions of the traditional “casa,” from the humblest types to the more elaborate ones. Houses A, B, C and D are “a terreno” (only one floor) for poor craftsmen (*fig. 20*). Houses E, F, G and H are “a solari” (with two floors) and proper for “a piu accomodato artefici” (*figs. 20, 21*). Houses I and K are the first with shops, being proper for “un rico artefici, o buon mercante o anche per un cittadino” (*fig. 21*). Houses L, M, N and O are only for citizens or merchants of higher rank, having a symmetrical arrangement, central entrance and a formal courtyard (*figs. 22, 23*). This last group of houses is closer in arrangement and dimensions to the examples of minor palaces shown before. On the following plates of the manuscript (52 to 59) Serlio deals with larger private palaces. In his Seventh book, Serlio addresses a different problem of design practice in the 16th century which was mentioned earlier (page 13): how to

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<sup>27</sup> Serlio, Sebastiano. *Serlio on domestic architecture* (ed. M. Rosenfeld). New York, 1978.

design a palace according to Renaissance principles of plan composition on a small and irregular plot in the city.<sup>28</sup>

### **Minor palace features: a summary**

The issues discussed above suggested that minor palaces cannot be rigidly defined as such, but a few features help to identify them:

1) Roman minor palaces in the 16th century are generally commissioned by the lesser nobility, composed of well-to-do businessmen and by professional men (doctors, lawyers, professors, bureaucrats, diplomats, etc.). In rural societies of Northern Italy (such as Palladio's Vicenza), patrons are generally wealthy landowners with humanist aspirations who exercise public office in town.

2) The ground floor area of minor palaces generally ranges from 300 to 1.000 m<sup>2</sup>, for buildings with a basement, two main floors (with mezzanines) and an attic. This criteria is applicable to most palaces designed in the 16th century, both in Rome and in the Veneto (see tables 2, 3 and 4). In the city of Venice, a third floor is added to compensate for the lack of a basement.

3) Minor palaces look like large palaces in the arrangement of the plan (symmetrical, axial) and in the elements of composition employed (atrium, loggia, courtyard, sala). The basic difference is that the elements employed are smaller, simplified and fewer in number. Such similarity with the planning structure of large palaces distinguishes the minor palace from the "casa," which may present stylistic features of palaces, but not their planning principles.

4) Minor palaces are structures inserted in the urban fabric rather than large palaces, which stand out as monuments. Large palaces are generally taller than their neighboring buildings, have larger areas opened in front of their main facades

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<sup>28</sup>Serlio, 1584.

and sometimes are freestanding structures. In the case of minor palaces, monumentality and distinction from the common fabric are acquired through facade treatment (classical orders, rustication, disposition of openings).

5) Minor palaces are generally built on irregularly shaped plots facing narrow streets, which are constrained by adjacent structures, limiting the extension and visibility of the facade. Minor palace plans show an effort to mask these constraints and impose a regular arrangement on the plot.

### **The professional architect**

From documents related to the construction of churches, public buildings or large palaces in the 14th and 15th centuries in Italy, it is known that architects were only one of the participants of the process of designing a building.<sup>29</sup> Their share in the authorship of a project was variable, being bigger or smaller depending on who was the architect, who was the patron (or patrons) and which were the circumstances of the commission. In any case, patrons and building committees had a considerable influence on design decisions, and were able to interfere at any moment to make revisions in the project. A large number of private palaces were built in 14th and 15th century Florence, but no architect emerges from the documents as the designer of many, neither a personal style can be identified with certainty from the palaces built, at least until Giuliano da Sangallo, late in the 15th century. Florentine palace tradition seems to have evolved gradually as the result of a collective effort of humanists, learned businessmen, artists and builders. Almost anonymous, this process had to face the issue of the recurrence of the same type of

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<sup>29</sup>See Ettlinger, Leopold. "The emergence of the Italian architect during the 15th century" in Kostoff, S. (ed.) *The architect: chapters in the history of the profession*. Oxford, 1977: pp. 96-123; and Hollingsworth, Mary. "The architect in 15th century Florence" in *Art History* vol. 7, n. 4, 1984: pp. 385-410.

building, and resulted in the definition of a standard type of plan, centered on the regular courtyard with androne, loggia and staircase connected to it in a sequence (fig. 24).

In contrast to such Medieval system of designing and building, based on the workshop acting under the coordination of the “capomaestro” assisted by the prince and/or a building committee, in early 16th century Rome many changes were introduced in the practice of architecture which started to shape the modern outlook of the profession. What are the factors of such change? At that moment, architects became professional designers who conceived buildings on paper informed by a specific body of knowledge and using particular means of representation. Such body of knowledge was not only technical and ornamental, but comprised full acquaintance with Ancient Roman archeological remains (involving their reconstruction and the use of compositional principles derived from them) and the interpretation of Vitruvius’ treatise on architecture (as an Ancient Roman text, it was central in the effort to raise architecture to the level of a humanist branch of knowledge).<sup>30</sup> The “recovery” of Vitruvius in early 16th century introduced a new set of parameters for design, which included proportional relations, symmetry, classical detailing and articulation, and the specific treatment of some building types (including the patrician urban house). Vitruvius can be found in the drawings of Sangallo and Peruzzi, where rooms of palaces are named with Italianized versions of words found in his treatise (“atrio,” “triclino,” “cavo edio,” “peristilo,” etc.). Renaissance architectural writers made great efforts to understand and apply Vitruvius’ remarks on domestic architecture to

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<sup>30</sup>Vitruvius. *The ten books on architecture* (transl. by M. Morgan). New York, 1960; edition with Latin text and English translation: *De Architectura* (transl. by F. Granger). Cambridge, 1931 (2 vols.).

contemporary needs.<sup>31</sup> New editions of Vitruvius appeared early in the 16th century, making the treatise available to a wider audience. In 1511 Fra Giocondo published a Latin edition with textual corrections and for the first time, illustrations interpreting visually Vitruvius' arguments.<sup>32</sup> Cesare Cesariano published his Vitruvius in 1521, now in Italian and with a commentary and numerous illustrations.<sup>33</sup> The next advance on Vitruvius' scholarship would come with Barbaro's edition of 1557, illustrated by Palladio.<sup>34</sup> Architectural literature in Italian with illustrations flourished in the 16th century: Alberti's illustrated treatise was published in 1546 and 1550, Serlio from 1537, Vignola in 1562 and Palladio in 1570. These books were fitted to supply the intellectual and practical needs of the professional architect and to promote the standards of the profession among the general public.

Bramante, Raphael and Antonio da Sangallo the Younger developed new instruments of representation in early 16th century with the innovative system of orthogonal projection in drawing, used for the reconstruction of antique buildings

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<sup>31</sup>see Pellecchia, L. "Architects read Vitruvius: Renaissance interpretation of the atrium of the Ancient house" in *Journal of the Society of Architectural Historians* LI, 1992: 377-416.

<sup>32</sup>Fra Giocondo. *M. Vitruvius per Iocundum...*Venice, 1511.

<sup>33</sup>Cesariano, Cesare. *Vitruvius de architectura*. Munich, 1969 (facsimile of Como edition, 1521, with introd. by C.H. Krinsky).

<sup>34</sup>Barbaro, Daniele. *I dieci libri dell'architettura - Vitruvio; tradotti e commentati da Daniele Barbaro*. Milan, 1987 (facsimile of 1567 ed. with essay by M. Tafuri).

and applied to architectural design.<sup>35</sup> Such system combines plan, elevation and section in a single set, greatly increasing the control of the composition (or the precision of the survey). The same period also shows the increasing importance of initial sketches (many of them plans) as a typical professional tool in the process of design.<sup>36</sup> The need to employ such design instruments combined with a body of knowledge orienting the project separated the practice of architecture from the building trades and transferred the command of the design process to the architect. In the case of palaces, the design became progressively centered on the creation of an effective arrangement of the plan. The logical need of accommodating the program of a residence in a given plot, controlling the location and connection of different parts according to proportion, symmetry and the demands of use were the reasons for such focus on planning. Initial sketches of plans by Sangallo, Peruzzi and Palladio provide evidence that the plan sketch became the starting point and central ground for minor palace design in early 16th century Italy. In fact, Giuliano da Sangallo's designs for monumental palaces in Florence, Naples and Rome in late 15th and early 16th century first demonstrate how the program of a great residence at that time was requiring a specific focus on the plan. The survey and reconstruction of the great architectural ensembles of Ancient Rome by Renaissance architects also stressed the importance of the plan in organizing a

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<sup>35</sup> See Frommel, Christoph. "Introduction. The drawings of Antonio da Sangallo the Younger: history, evolution, method, function" in Frommel (ed.). *The architectural drawings of Antonio da Sangallo the Younger and his circle* (vol. 1). New York, 1994: pp. 1-60; Frommel, Christoph. "Reflections on early architectural drawings" in Millon, H. and Lampugnani, M. (eds.). *The Renaissance from Brunelleschi to Michelangelo. The representation of architecture*. Milan, 1994: pp. 101-122; Lotz, Wolfgang. "The rendering of the interior in architectural drawings of the Renaissance" in *Studies in Italian Renaissance architecture*. Cambridge, 1977: pp. 1-65.

<sup>36</sup> See Burns, Howard. "The lion's claw: Palladio's initial project sketches" in *Daidalos* no. 5 (1982): pp. 73-80; Thoenes, Christof. "St. Peter's: first sketches" in *Daidalos* no. 5 (1982): pp. 81-98.

complex program, and this was transferred to the task of designing recurrent commissions of minor palaces.

The following chapters present examples of design work from Sangallo the Younger, Peruzzi and Palladio which illustrate the introduction of these new planning procedures in commissions for minor palaces in 16th century Italy. The examination of these sets of original drawings provides a living picture of Renaissance architects at work. The sheets show not only well finished drawings, but also numerous sketches of plans, drawn quickly and in small scale. Their most remarkable feature is to show the dynamics of the design process in the constant flow of new solutions which once materialized on the sheet are submitted to criticism and revision by the designer. Plans are drawn to be reworked, or to generate other new plans. Ideas come up to be soon sketched over; spaces materialize to be immediately transformed. Simple small sketches are produced in large number, reflecting the restless movements of the architect's mind finding expression in the rapid strokes of his pen. Used sheets have their blank spaces filled by these fast-produced plans. Pencil and brown ink are mixed in the same sequence of drawings; measurements and a precise outline of the plot are alternated with more abstract schemes. The orientation of the plans on the sheet is sometimes diverse (suggesting that the sheet was turned around many times during the process) and sometimes more systematic (with the sketches aligned and placed in a similar position): the first may express the desire of liberating each new sketch from the previous one, while the other may reveal the intention to follow the development of the whole set of solutions. The information on these sheets is only fully appreciated by studying them in the original.



The contrast between these sketches and the alternative plans which follow in the process is remarkable. The second type of plan represents a crystallization of the process: the nervous and struggling character of the sketches is replaced by the precision of straight lines in larger scale, based on an orthogonal grid. Probably considered less valuable than finished drawings by the architects themselves, few of the sheets with sketches have survived, which increases their value in documenting for the first time in history the process of architectural design in its early stages. Therefore, their examination becomes crucial for the understanding of an emerging private practice of architecture in 16th century Italy.

## **PART 1 - THE WORKS**

**Casa Sangallo on the via Giulia, Rome**

**Palazzo Sangallo, Rome**

**Palazzo Ricci, Montepulciano**

**Palazzo on RIBA XI/22v**

**Palazzo Barbarano, Vicenza**

## CHAPTER 1- Antonio da Sangallo the Younger & the Casa Sangallo on the via Giulia (“Casa di Banchi”)

Between 1534 and 1536, Antonio da Sangallo the Younger designed a new house for himself on the via Giulia, in Rome. The date coincides with the ascension of cardinal Alessandro Farnese to St. Peter’s chair as Paul III (1534). Sangallo was associated with cardinal Alessandro since 1514-15, when the architect started to work on the design for the Palazzo Farnese. Already famous as “capomaestro” of St. Peter’s since 1520, Sangallo’s status increased with the election of his patron as pope. Indeed, in 1536 the pope reconfirmed his appointment at St. Peter’s and also promoted Antonio to “architect of all the works of the Papal States.”<sup>1</sup> Therefore, it is possible to understand Sangallo’s new private enterprise as the will to make his residence express his growing status in Rome.

The architect leased a plot on the via Giulia from the chapter of St. Peter’s in 1516, with more land being added later.<sup>2</sup> Opened by pope Julius II in 1507-8, the new street was to be the main axis of a huge urban program intending to define the new center of business and administration of the city of Rome (*fig. 25*).<sup>3</sup> The

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<sup>1</sup>Silvan, Pier Luigi (ed.). *San Pietro, Antonio da Sangallo, Antonio Labacco. Un progetto e un modello. Storia e restauro*. Milan, 1994: p. 44.

<sup>2</sup>See Frommel, Christoph. *Der Römische Palastbau der Hochrenaissance*. Tübingen, 1973: vol. 2, pp. 315-321; and Tafuri, Manfredo. “Palazzo Sangallo-Medici-Clarelli” in *Via Giulia. Una utopia urbanistica del 500*. Rome, 1973 (II): pp. 272-278.

<sup>3</sup>See Spezzaferro, Luigi. “La politica urbanistica dei Papi e le origine di via Giulia” in *Via Giulia. Una utopia urbanistica del 500*. Rome, 1973: pp. 15-64; and “Place Farnèse: urbanisme et politique” in *Le Palais Farnèse: École française de Rome*. Rome, 1981: 90-92; see also Tafuri, Manfredo. “Via Giulia: storia di una struttura urbana” in *Via Giulia. Una utopia urbanistica del 500*. Rome, 1973 (I): pp. 65-152.

area would comprise the new Palazzo dei Tribunali, to be placed in front of an open square, with the Palazzo della Cancelleria Vecchia on the other side. The ambitious project died with pope Julius (1513). Deprived of its center (the Palazzo dei Tribunali and the piazza) and isolated on one end (as the bridge to the Borgo was not built), the via Giulia became the expression of the failure of an ambitious enterprise. Julius II's successor Leo X Medici established the church of San Giovanni dei Fiorentini (competition held in 1517) on the northern end of the new street, to create a Florentine quarter in Rome, where the artists and other members of the Tuscan lesser nobility and business class would live. The establishment of the church proved to be an effective policy in making the area attractive for real estate investment.<sup>4</sup> In this context, Sangallo (1516) and Raphael (1520) got their leases on the via Giulia. As respectively first and second architects of St. Peter's, they acquired plots which belong to the chapter of the church which employed them. Raphael leased an entire block just in front of Antonio's plot on the via Giulia, having designed for his plot a complex of two palaces (one for himself) with workshop space. However, he died soon after and was not able to start building his new house (*fig. 8*).<sup>5</sup> Having got his plot in 1516, Sangallo also did nothing on it at this time, and even the church was not started. The development of the area would gain momentum only in the years after the Sack of Rome (1527).

Contrary to Raphael's freestanding block, Sangallo's property is a trapezium-shaped plot in the middle of a block, with other properties on both

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<sup>4</sup>See Tafuri, 1973 (I): p. 78.

<sup>5</sup>On Raphael's house, see Spezzaferro, Luigi. "La casa di Raffaello" in *Via Giulia. Una utopia urbanistica del 500*. Rome, 1973: pp. 265-269; Tafuri, Manfredo. "Progetto di casa in via Giulia, Roma, 1519-1520" in Frommel, C., Ray, S. & Tafuri, M. (eds.). *Raffaello architetto*. Rome, 1984: pp. 235-240.

sides. The proximity of the Tiber river determined the oblique termination on the back. Measuring 18.70m by 28m (length of the central axis), the plot allowed for a built area of 524 square meters on the ground floor, including the courtyard. The palace was designed and built from 1534 to 1542.<sup>6</sup>

This kind of commission is peculiar, because the architect here designs a house for himself. Usually, the issue of the input of the patron in a residential project is significant in explaining some features of the building. However, in cases like this, the architect has to combine his own design preferences with his personal interests as the patron of a palace. The history of the project is registered in three plans: U 1315, U 1092 and U 1224 (*figs. 26-28*). The small plot is clearly delimited by surrounding property, street (the via Giulia) and river (the Tiber). In this context, the role of the survey in the planning process is more limited if compared to Sangallo's design for the Palazzo Pucci in Orvieto, where he proposed to transform a large area of the medieval core of the town with his project (*figs. 29, 30*). When designing the Palazzo Pucci, Sangallo drew his plans on sheets previously prepared by assistants, containing a survey of the plot and the urban fabric around it.<sup>7</sup> However, in a much less pretentious project such as the architect's house, the boundaries for design speculation were already set from the beginning. In contrast to Raffaello Pucci in Orvieto and Raphael in Rome, Sangallo couldn't think of acquiring more land to build a freestanding palace. His house was to be a part of the urban fabric, and not a monument distinguished of it.

No sketches of plans remain among the drawings for Sangallo's house. They exist in great number for Sangallo's palace on the via Giulia (later renamed Palazzo

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<sup>6</sup>Frommel, 1973, vol. II: p. 318.

<sup>7</sup>See chapter 5, page 123.

Sacchetti). In this first house, is possible that plan sketches were made by the architect before the proposals were drawn with a rule. However, in the first two proposals (U 1315 and U 1092; *figs. 26, 27*) one notices the “incompleteness” of the drawings and the freehand additions done by Antonio as a further development of the original idea. Only the last sheet (U 1224; *fig. 28*) contains a clean finished drawing, the virtual conclusion of a process of design which ironically was not adopted for construction. Therefore, despite the lack of plan sketches, Sangallo’s procedure here is clear: as one idea is crystallized on the sheet, further developments are immediately conceived by the architect and sketched over the first ones.

The first plan for the palace (U 1315; *fig. 26*) presents the ground floor area, with written information about some parts above and below.<sup>8</sup> The other levels of the building are not represented, but Antonio provides written information about them. It is interesting to notice that nothing is said about the arrangement of the piano nobile, where the architect would live. Sangallo and other 16th century Italian architects sometimes indicate the sala above with crossed lines on the ground floor plan. Such information coupled with the position of the staircase clarifies much of the arrangement of the ceremonial areas of the piano nobile. However, Sangallo does not indicate here where his sala would be located. He was probably thinking of solving the ground floor disposition first, to proceed to the piano nobile in a second moment. Based on other plans by Sangallo, the modules of the shops below could be easily used to determine the arrangement of the sala above, comprising the space of the three modules, with a “camera” over the remaining ones. When designing small palaces, Sangallo usually subdivides the

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<sup>8</sup>Inscriptions on all drawings related to this project are transcribed in Frommel, 1973, vol.II: pp. 317-318.

main facade in five or seven bays, with the androne in the middle. On the piano nobile, the sala comprises the androne bay plus one entire side, while the other side has one or two “camere.” This is the case in small palaces like the Baldassini and Leroy (*figs. 31, 32*). In other plans for palaces with shops, Sangallo usually places the sala in the middle, corresponding to the androne and two shops on each side. This is the case in the Palazzo Orsini (U 1004), the Palazzo del Vescovo di Cervia (U 709) and Sangallo’s palace on the via Giulia (U 990; *see figs. 51, 57, 42*). Assuming that the sala here occupies the space equivalent to two shops and the “androne,” it would measure 9.40 x 6.70 m, with an area of 63 square meters. Such area is much smaller than those of other minor palaces of similar size, like the Angelo Massimo (total: 467 m<sup>2</sup>; sala: 98 m<sup>2</sup>) and the Baldassini (total: 797 m<sup>2</sup>; sala: 112 m<sup>2</sup>; *figs. 10, 31*).

There are five subdivisions on the front part of the palace: four of them are “botteghe” with mezzanines above, while the central opening is the androne leading into the palace. Sangallo includes shops in the first proposal for his house, probably to help defray some of the expenses of his new palace. However, one of the shops was planned to be connected to the large room which faces the staircase (there is a door in dotted lines in the wall). This might be the location of the architect’s workshop, following examples such as Raphael’s house in the same Via Giulia, designed in 1520 with two wings of “botteghe” on the ground floor for the artist’s workshop (*fig. 8*). However, the idea of linking one shop to the inner rooms seems to be a later thought: most likely, the initial idea was to have shops to rent out.

The access into the building is “pyramidal,” as the narrow androne ends in a slightly wider corridor, followed by the deep courtyard. Therefore, three increasingly wider spaces are disposed in a longitudinal sequence. The

compositional axis stressed by such arrangement ends in an apse at the end of the courtyard. Such apse is an ingenious device to cope with the oblique ending of the plot maintaining the regularity of the courtyard. The “vestibule” after the androne has three openings on each side: on the left are two niches and a door to the large room behind the shops; on the right is the staircase and an entrance to a room, described as a “camera.” However, the presence of running water and a fireplace in a room preceded by a vestibule suggests its use as a private bath. Behind this “camera” Sangallo places a storage area with a mezzanine for hay. He also informs us that stables for seven horses would be located under the “camera” and storage area. The wing on the other side of the courtyard comprises three rooms of similar size. The architect writes there about cellars in the basement, which belong to tenants located above and on the ground floor. Therefore, it is known that there are cellars under the courtyard loggia and the left side rooms, but not much is said about the ground floor use. The cellar below the loggia belongs to the “pigionante di sopra” (tenant above), which probably means that the third floor would be rented out. The cellar besides the spiral staircase belongs to the “pigionante a terreno” (tenant of the ground floor), which means that part of the ground floor would be rented out for domestic use, too. The lack of any connection between the two last rooms on the left wing and the rest of the palace would then be explained: the entrance of this independent apartment opens to the street on the back, facing the river. The spiral staircase would provide convenient circulation for the tenants, linking street level, basement, ground floor, second floor and mezzanines independently from the ceremonial circulation of Sangallo’s house.

The project of a small palace comprising residence, shops at street level and apartments to rent out defines an ingenious solution where the design procedure addresses economic issues in order to make the palace viable. Such combination



was crucial to cope with the needs of the Roman lesser nobility when commissioning their houses in the city. However, Sangallo was not creating a new type of palace: he was just trying to explore further possibilities. Works such as the Palazzetto Turci (c. 1500), the Palazzo Caprini (c. 1505) and the Palazzo Pichi (before 1510; *fig. 18*) had already introduced the theme of the small palace providing additional income for the owner through rental space. Sangallo had a small family (his wife and two sons) and in this first plan for his new house, he reserved only the piano nobile for himself, allowing a large area of the building to be rented out (shops and apartments).

Sangallo did not seem satisfied with this first proposal. In fact, problems of illumination and ventilation are evident in the staircase and in the room placed in front of it on the ground floor. Antonio, who had criticized the design of Raphael's house on the via Giulia exactly on these terms seems to be conscious of the problems.<sup>9</sup> Therefore, he proceeds to rework the plan by sketching a new staircase in the first room of the left wing of the palace (*fig. 26*). Connected with this correction, the architect also changes the location of the loggia in order to have it linking androne and staircase: two new columns are sketched after the end of the "androne." With such move, Sangallo returns to his traditional sequence of androne/lower loggia/staircase/upper loggia/sala, introduced in the Palazzo Baldassini (1514-16; *fig. 31*) and constantly employed in his palace architecture. The modifications determined the abandonment of the present sheet for a new one, where the corrections would be better developed.

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<sup>9</sup>See transcription of Sangallo's comments on U 310 in Frommell, Ray and Tafuri, 1984: p. 236.

The sheet U 1092 contains the changes announced in the previous drawing, and adds further investigation, which includes the sketches for the “Serliana” in the courtyard, on the upper part of the sheet (*fig. 27*). The palace continues to be divided in two main sectors: the front part comprising entrance and side rooms, and the rear section with two wings divided by the courtyard. The axial disposition is kept, and so its apsidal termination. In the front section, the arrangement with shops and androne is replaced by a very large atrium with two rooms on each side. A change in Sangallo’s financial situation might explain such a move from rental spaces to private rooms. Another possibility is to consider the change as an expansion of the architect’s workshop which now would comprise the whole front section on the ground floor. However, no information is given about the function of the rooms in this part. In 1552, Sangallo’s son Orazio sold his father’s second house on the via Giulia to cardinal Giovanni Ricci, and a collection of sculptures owned by Sangallo was included in the transaction. The large atrium introduced here in U 1092 might have been planned as a space to display such collection. The steps and dotted lines in the middle of this room indicate the alternative of dividing it in two, and this was done later in the third drawing (U 1224; *fig. 28*).

The rear part of the palace is very unclear: Sangallo sketches different locations for the staircase, finally covering the whole area, except for the courtyard and loggia. The attempts on the left wing on the rear part of the palace didn’t seem to please the architect. Sangallo writes there that stables would be located below and a kitchen above, on the piano nobile. This information was probably written after the staircase was moved to the other side: it would be impossible to have these rooms and the staircase occupying the same space. As the staircase is moved to the right side, it is placed where it was finally to be built. Here it follows the model of the Palazzo Baldassini in having a small initial flight oriented toward the

loggia (serving as visual orientation of the ceremonial route) followed by a 90-degree turn, where the major flight begins. But Antonio doesn't seem to be happy again: probably he had problems in accommodating the steps needed in the length available. The lack of a landing in the middle (changed for a spiral turn) exposes the problem. Consequently, this staircase is crossed out. The profusion of staircases prevents one to realize the arrangement of the rear part of the palace, except for the new position of the loggia in the courtyard. Here one trait of Sangallo's design thinking becomes evident: he concentrates on specific problems (usually staircase, courtyard and loggia), dealing with them until getting the best of a plan proposal. When the alternative is exhausted (or he is exhausted), Antonio goes on to a clean sheet and start again, taking the best solutions from the previous sheet as his new point of departure.

In this plan Sangallo changed the position of the courtyard loggia from the back to the center of the building. After drawing the new courtyard, the architect probably examined the new solution, with the apse, the two columns of the loggia on the other side and the pilasters projecting from the side walls. At this moment, the plan of an open basilica may have come to his mind, and he draws four circles corresponding to columns where the lines of pilasters intersect.<sup>10</sup> The unique courtyard then created would have two covered "aisles" on both sides and a nave opened to the sky, ending in the "sacred" area of the apse. Sangallo probably got the inspiration from Vitruvius, who includes "basilicas" as a type of room to be found in the house of a "man of rank" (Book VI, 5, 2). The idea can also be connected to Antonio's interest in Early Christian and Medieval architecture at

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<sup>10</sup>Tafari, 1973 (II): p. 273.

that time, manifested in his late church designs.<sup>11</sup> Despite its uniqueness, the solution proved unpractical: the covered aisles would reduce the natural light and ventilation provided by the courtyard, and also the small area available would reduce the impact of the idea.

As with the previous sheet, no information is given about the piano nobile. Despite that, the idea of the large atrium below would find a logical correspondence in the sala above, defining a longitudinal hall. Connecting courtyard and street facade, this kind of room recalling the Venetian palace halls was used by Peruzzi in his Palazzo Massimo alle Colonne (1533; *fig. 83*), started about five years before Sangallo's house. In the Palazzo Pucci in Orvieto (U 969; *fig. 30*), Sangallo also placed a longitudinal atrium linking entrance and courtyard loggia, and the sala above was probably in the same position.

In the sheet U 1224 (*fig. 28*), most of the innovations previously seen in U 1092 are incorporated. Contrary to the previous two drawings, the third one is a finished plan in which everything is drawn with a rule and nothing is sketched on. Measurements are provided, which indicates that the drawing could serve as a reference for construction. Sangallo also uses Italianized Vitruvian vocabulary to name the main areas of his palace, like the "atrio," "peristilio" and "cavo edio." Such features are not included to impress a learned client: this is the architect's own house. Therefore, the drawing manifests a kind of "didactic" character: here Sangallo prepared an example of minor palace architecture to serve as guidance for others when examining his collection of drawings.

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<sup>11</sup>See Benedetti, S. "Il modello per il S. Pietro Vaticano di Antonio da Sangallo il giovane" in Spagnesi, G. (ed.) *Antonio da Sangallo il giovane: la vita e l'opera*. Rome, 1986: 157-185.

The general arrangement of this plan is very similar to the previous one, reinforcing the impression that the second drawing (U 1092) is a preparatory study for the third one (U 1224). The emphasis of the central axis from entrance to courtyard apse remains intact. On the front part of the building, the arrangement is almost the same, except for the division of the large entrance hall in two rooms (“vestibolo” and “atrio”). No indication is given about the functions of the rooms in this area, and one can only suggest again the location of the architect’s workshop there, combined with the more ceremonial character of the two central rooms (where works of art could be displayed). Another possible use is for a second apartment (for the summer or for guests). Such uses are supported by the presence of sanitary installations in the room closer to the staircase. Here one concludes that in this drawing, Sangallo didn’t want to stress the circumstantial aspects of the project indicating uses, but rather intended to focus on the general applicability of the plan as a solution for a typical problem. However, 16th Roman century palaces without shops usually had the front part of their ground floors used for audience rooms of a more public character, sometimes related to the occupation of the owner. Examples of that are palaces like the Castellesi, Farnese and Baldassini. Therefore, it would be natural for Sangallo to have his workshop in this area of his palace. Giulio Romano also had his “studio” on the front part of his house in Mantua (1540), accessible through the androne and not from the street.<sup>12</sup>

On the rear section of his palace, Sangallo introduces few changes. The courtyard remains the same: a square 36 palmi (8 m) long with three side walls articulated by four pilasters and a fourth side with a loggia. The walled bays have niches, and the apse now becomes a little smaller. Such arrangement is similar to

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<sup>12</sup>See Fiore, Francisco Paolo. “La casa di Giulio a Mantova” in *Giulio Romano*. Milan, 1989: 481-485.

the courtyards of two other minor palaces designed by Sangallo: the Palazzo Baldassini (1514-16; *fig. 33*) and the Palazzo Le Roy (c. 1520; *fig. 37*). These three palace plans have square courtyards, with a three-bay loggia on one side and its replica as a relief motif on the other three elevations. This seems to be a standard solution for very small courtyards, and the diversity of composition in these three cases speaks about its effectiveness. In the Palazzo Baldassini, the three arches have equal spans, being framed by four Doric pilasters with an entablature. In the Palazzo Le Roy, a “Serliana” is used in the loggia, being transposed as a relief motif to the other three walls. Rather than pilasters, here Sangallo uses columns and half-columns. In the plans for his house on the via Giulia, Antonio tries two variations: in U 1092 (*fig. 27*), he uses the “Serliana” (as revealed by the larger central bay and by the sketches on the upper part of the sheet), and in U 1224 (*fig. 28*) he proposes equal bays. In both alternatives, he has columns in the loggia and pilasters on the walls. Sangallo’s study plan for an unidentified house in the sheet U 1247 (*fig. 38*) provides a fourth example of this kind of courtyard, in this case applied to a very irregular plot. Sangallo’s inventive manipulation of the classical elements makes each of these courtyards a singular solution, despite being based on a similar basic formula.

On the third plan for Sangallo’s house (U 1224; *fig. 28*), the service staircase is located on the left side of the loggia. This staircase connects one of the front rooms to the rest of the house independently from the main circulation. Possibly the ground floor room closest to this staircase was to be the architect’s office, being directly connected with his quarters above. It is also possible to see here a connection between the kitchen (on the piano nobile over the stables, as indicated in the previous drawing) and the courtyard loggia and front rooms below. These spaces were very convenient for special gatherings during the summer, when

ground floor areas were better isolated from the heat. No indication about the disposition of rooms and functions on the piano nobile is given in this sheet (U 1224). However, the sala would naturally correspond to the vestibule/atrium below, measuring 12.40 x 6.50 m (area: 80.60 m<sup>2</sup>). The architect's apartment would be located on the right side of the sala, where sanitary installations would be available.

The left wing of the rear part of the palace comprises the access to the well, followed by the stables, already proposed for this location in the previous drawing (U 1092). The "stufa" mentioned in the rear part of the stables probably means a stove to heat a private bath above rather than a sweating-room accessible from the stables. The staircase is placed again on the right wing, but now with a proper landing in the middle.

Raphael's design for his house on the via Giulia was mentioned previously. Since the two most important designers of St. Peter's acquired property in the same area by the same time and designed palaces for themselves there, is it possible to trace some connection between the two projects? The first problem is chronological: the two plans of Raphael's house (U 310 and 311; *fig. 8*) were made between 1519-20, while Sangallo's plans for his house were made much later (1534-36). However, it is natural to assume that Antonio was thinking about his new house since he got the lease in 1516. It is known that he was very well acquainted with Raphael's design, as he wrote many critical observations on the sheet with the ground floor plan (U 310).<sup>13</sup> All of his remarks were related to technical or ornamental matters (proper illumination, location of windows, use of orders) and none of the remarks questioned the articulation of the plan. In fact,

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<sup>13</sup>See transcription of Sangallo's comments on U 310 in Frommell, Ray and Tafuri, 1984: p. 236.

the plan of Raphael's house might have inspired certain solutions in Sangallo's proposal. The courtyard with a "Serliana" (probably used by Raphael) and ending in an apse is a common feature in both projects. Sangallo's idea of a "basilical courtyard" in U 1092 can be seen as an effort to transpose Raphael's courtyard to the smaller dimensions of his plot. Moreover, the semicircular shape of the apse is used as a device to adjust irregularities in both plans.

The three drawings already discussed are the only extant documents about the process of planning of Sangallo's first house on the via Giulia. Unfortunately, none of them shows the palace plan as it was finally built (*figs. 39, 40*). The actual palace incorporates some ideas already presented in the drawings and also introduces significant innovations. The most remarkable change is the abandonment of the principle of axial symmetry that was consistently followed in the previous proposals. The central axis is still the spine of the building, defining the sequence androne-loggia-courtyard-apse. However, the courtyard is slightly extended to the left side, while the loggia is extended to the right side, both becoming off-centered in relation to the entrance axis. In fact, the courtyard now includes the space previously occupied by the loggia in U 1224 (*fig. 28*). The loggia is moved to the position occupied by the atrium and the room on its right side in U 1224. Such large and asymmetrical loggia is very similar to the ones in 15th century Florentine palaces, which served for special gatherings in the summer. In the built version of his palace, Sangallo abandons the axial symmetry of the Palazzo Baldassini scheme for a more complex balance between opposites: a transversal loggia projecting to the left compensates for a longitudinal courtyard extending to the right. Subtleties like this may have been inspired by the plan of Peruzzi's Palazzo Pietro Massimo (started in 1533; *fig. 83*). With the death of



Peruzzi in 1536, Sangallo probably felt greater liberty to incorporate some planning principles of his former assistant in the workshop of St. Peter's.

However, if Peruzzi's flexibility and informality in composing a plan can be seen here, his classical refinement is absent. Benedetti has pointed out the "a-classical" character of this building:

*In questa fabbrica infatti Sangallo tenta il salto estremo: espungere dalla macchina architettonica la qualità decorativa dell'ordinanza componendo per masse e pareti, cadenzate dalle sole articolazione delle aperture, in una col desiderio a spingere i coordinamenti spaziali dell'organismo oltre la canonica assialità.<sup>14</sup>*

Classical articulation was a fundamental aspect of Sangallo's palace architecture, and this is evident in his courtyards. Even his plain facades (where he rejects the model of Bramante's Palazzo Caprini) do not hide the importance given to classical language, shown in pedimented windows, cornices and trabeated portals. But in the built version of his house, Antonio tries to minimize the self-expression of classical members in the articulation of the building. The best demonstration of such intention is the "Serliana" in the courtyard, defined in terms of simple lines, with no entablature or arch profile. Even more radical is the treatment of the rear elevation of the courtyard, where the asymmetric arrangement is made explicit. Sangallo's interest in medieval church architecture at this moment in his career was already mentioned earlier and could have inspired such unorthodox attitude.

Concerning palace architecture, the same attitude might be identified in relation to the Florentine tradition. The architectural traditions of Antonio's

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<sup>14</sup>Benedetti & Zander, 1990: 218.

homeland were naturally a background for him when preparing a new palace plan.<sup>15</sup> Florentine palace planning in the 15th century combined a certain degree of systematization (as in the Palazzo Medici) with flexibility of arrangement (as in palaces like the Rucellai, Boni-Antinori and Pazzi; *figs. 1, 2, 24*). A less rigid engagement with the classical orders was at the root of such design procedure. In looking back to the Florentine palace tradition, Sangallo probably found a practical way to cope with the problems of planning a minor palace. This also enabled him to assimilate some of Peruzzi's lessons, making the composition more dynamic and flexible compared to the "classical" model introduced by Bramante in the Palazzo Castellesi and systematized by Sangallo himself in the Palazzo Baldassini. The minor role of the orders, the absence of absolute symmetry on the plan, the large area of the courtyard loggia and the return to the androne with a rusticated arch in the portal are indications of such change.

Another factor that might have influenced the final arrangement of Sangallo's house is that in 1542 he purchased a new plot one block ahead on the via Giulia (on the corner with the vicolo del Cefalo). This was a larger and better located plot, affording the opportunity of a more distinguished house for the architect. If the plan to obtain the new plot was being contemplated before 1542, it would explain the simplified arrangement of Sangallo's house, which would then be completed to be rented out in all its parts, after the completion of the new palace.

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<sup>15</sup>See Benedetti, Sandro. *Fuori dal classicismo*. Rome, 1984: pp. 33-56.

## CHAPTER 2 - Antonio da Sangallo the Younger & the Palazzo Sangallo on the via Giulia (“Casa di San Biaggio”)

In 1542, Sangallo acquired a new plot on the via Giulia, this time in the corner with the vicolo del Cefalo, located one block from his previous house in the same street (*fig. 41*).<sup>1</sup> Sangallo’s ascension in Rome at this time was already mentioned in the previous chapter (page 36): with the election of cardinal Alessandro Farnese as pope Paul III in 1534 and the death of Peruzzi in 1536, Sangallo became undeniably the principal architect in Rome. By 1542, Sangallo was in charge of very important works that if all completed to his designs, would give him the credit for defining most of the image of 16th century Rome: the elaboration of the giant model for St. Peter’s, the construction of the Palazzo Farnese, the project of the Porta di Santo Spirito and the Vatican fortifications, and the conclusion of the Sala Regia and the Capella Paolina in the Vatican Palace. In this context, it was natural for Sangallo to think about a new house in which his status would be better reflected.

The land belonged to the chapter of St. Peter’s, which owned a large part of the area on both sides of the via Giulia. Giuliano Leno, a builder in the payroll of St. Peter’s workshop (as Sangallo) had leased the plot in 1514. There he started to build a house with shops, according to the terms of the lease. Leno died in 1535, not being able to finish his house, and the chapter of St. Peter’s took the property back. When Sangallo leased the plot in 1542, there were four shops rented in the existing parts of Leno’s house. The presence of these shops tells about the

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<sup>1</sup>See Andres, Glenn. *Cardinal Ricci, the builder from Montepulciano*. Florence, 1968: pp. 294-304; Frommel, 1973, vol II: pp. 292-304; Salerno, Luigi. “Palazzo Sacchetti” in *Via Giulia, una utopia urbanistica del 500*. Rome, 1973: pp. 288-313. All inscriptions on the drawings are transcribed in Frommel, 1973, vol. II: pp. 296-298.

commercial potential of the area, even after the failure of the project of the Palazzo dei Tribunali (which would face Sangallo's palace across the vicolo del Cefalo). The demand for rental space in the area could be important in providing additional means to build a palace.

Sangallo's new plot was a rectangle of about 26 X 36.50 meters, comprising a total of 950 square meters. Such dimensions were almost twice the size of the previous plot. But the improvement was not only a matter of size: the new plot was located on a corner, a position providing a tridimensional perception of the building and exhibiting two facades to the public space. Only a plot with a "piazza" in front of the palace could provide a better view. A total of 11 sheets related to this palace are preserved in the Uffizi, and six of them are plans.

The chronology of the project is difficult to define with precision: the plot was acquired in 1542, and Sangallo might have started to think about the new palace a little bit earlier, as negotiations began with the chapter of St. Peter's. An inscription on the third bay of the palace from the corner, between the ground floor and the piano nobile, reads: "DOMUS ANTONII SANGALLI ARCHITECTI MDXLIII." The plaque indicates that the ground floor elevation was already built in 1543, at least from the corner to the third bay. Sangallo's final design for the courtyard area (U 991) is dated 1545. One year later, the architect died and consequently, construction stopped. The unfinished building was sold by Antonio's son Orazio in 1552 to cardinal Giovanni Ricci, who hired Nanni di Baccio Bigio to complete and enlarge the palace. Today, the Palazzo Sacchetti occupies the site of Sangallo's second house on the via Giulia.

The present-day Palazzo Sacchetti is three-story high, with seven bays in its main facade on the via Giulia. However, Sangallo's only plan for the whole palace

(U 990; *fig. 42*) has only five bays on the main facade.<sup>2</sup> The other drawings (including U 991, dated 1545; *fig. 47*) maintain the same dimensions for the courtyard. As the right side of the courtyard marks the limits of Sangallo's plot in all drawings and the position of the androne in relation to the courtyard is constant, one knows that Sangallo designed a five-bay palace to the last proposal. Therefore, the two bays on the right side of the facade were added by cardinal Ricci. The fact that the inscription above mentioned plus a coat of arms were placed on the third bay in 1543 and today are awkwardly off-center (as the portal today is on the fourth bay) provides further evidence of the enlargement. Moreover, Sangallo designed his palace with shops on both street facades (U 990; *fig. 42*). There are no shops in the Palazzo Sachetti today, but infilled openings with arches are easily visible along the facade on the via del Cefalo and in the first two bays on the via Giulia. Differences in the brickwork on the sixth and seventh bays and on the whole length of the third floor when compared to the rest of the facade also reveal cardinal Ricci's additions, which are also pointed out by the different character of the windows on the ground level and third floor compared to the ones on the piano nobile, which probably remained from Sangallo's palace.<sup>3</sup> The conclusion is that Sangallo designed a building only five bays wide, with two main floors plus an attic (today, the palace has a third story above the attic). Antonio's courtyard, defined only in 1545 (U 991; *fig. 47*) was probably never

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<sup>2</sup>Sangallo writes on the sheet "per la casa mia di santo biagio," in reference to the area around the church of San Biagio della Pagnotta (located in the block where the Palazzo dei Tribunali would have been built).

<sup>3</sup>See Andres, 1968: p. 300.

started: today's large "cortile" was conceived by Nanni di Baccio Bigio after 1552 to fit in the enlarged palace.<sup>4</sup>

Sangallo probably started building the shops along the two street facades in order to obtain additional funding for the new palace while it was being built. Therefore, the two rows of shops in U 990 were defined from the beginning, and also some rooms on the piano nobile (the "sala," marked with crossed lines, occupies the three central bays). In fact, four of these shops should be a rebuilding of the former ones being used when Sangallo acquired the plot with Leno's unfinished house. To begin a palace by the shops on the ground floor was no novelty for Sangallo. The Palazzo del Vescovo di Cervia, designed by Sangallo after 1516 (drawing U 709; *fig. 51*), was to be similar in size to his second house on the via Giulia.<sup>5</sup> But differently from Sangallo's palace, the earlier building was planned with two "appartamenti" on the piano nobile. Occupying a plot with three street facades (via dei Banchi Vecchi, via dei Carceri and via Giulia), the Palazzo del Vescovo di Cervia would be located only two blocks from Sangallo's first residence on the via Giulia. It was planned as a freestanding building and so taking in consideration the eventual extension of the via del Confalone from via Giulia to via dei Banchi Vecchi (part of the restructuring of the area connected to the palazzo dei Tribunali; *fig. 41*). Despite the gap of 20 years between the conception of each,

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<sup>4</sup>The built courtyard presents a continuous peristyle, which would not be possible without the enlargement of the plot on the right side. Cardinal Ricci acquired land on this side of the palace in 1553 (Salerno, 1973: p. 292). Apart from that, the courtyard has been attributed to Nanni on stylistic grounds (Andres, 1968; pp. 302-304).

<sup>5</sup>The original project for the ground floor of the Palazzo del Vescovo di Cervia measured approximately 27.50 x 39 m (area: 1.100 m<sup>2</sup>), while Sangallo's palace ground floor measured 36.50 x 25 m (area: 950 m<sup>2</sup>). On the Palazzo del Vescovo di Cervia, see Pagliara, Pier Nicola. "Documenti sul Palazzo del Vescovo di Cervia" in *Bollettino del Centro di Studi per la Storia dell'Architettura* n. 25 (1979): pp. 35-44.

the Palazzo del Vescovo di Cervia and the Palazzo Sangallo reflect the commercial potential of the area in having their street elevations completely set apart for shops on the ground floor. Such maximum use of the ground floor for shops was firstly demonstrated in the plan for the Palazzo Pichi (c. 1510), attributed to Pietro Rosselli.<sup>6</sup> The plan preserved in Munich (Staatsbibliothek, Cod. Ic. 195, f. 13; *fig. 18*) shows that more than 20 “botteghe” were planned for the completed building. The Pichi and the Vescovo di Cervia plans show the effort of regularizing the fragmented urban fabric of Rome with freestanding “palace-markets,” an idea both convenient for the activities in the area and also profitable for the palace builders (and maybe essential to make their palaces viable). These private enterprises were not totally successful: only a half of the Palazzo Pichi was actually built, and the Palazzo del Vescovo di Cervia was stopped after a fragment of the original plan was built at the corner of the via dei Banchi Vecchi and via dei Carceri. Designed 20 years apart from each other, Sangallo’s palaces for Paolo Cesi and for himself reveal the strong commercial vocation of the area around the Via dei Banchi.

Sangallo started building the Palazzo del Vescovo di Cervia after 1530, beginning with one of the corner shops (as only the corner bays of the palace were completed). Therefore, it is possible to assume that he did the same in his own palace, starting with the two rows of shops on the ground floor (and maybe incorporating something of the preexisting shops). Seven shops can be found in U 990, but Sangallo does not include the rear part of the plot in this drawing and three more shops were built in the vicolo del Cefalo wing. It was stated above that the infilled arches for the shops can still be seen today, which means that Sangallo had built five bays on the via Giulia and eight on the vicolo del Cefalo, both up to

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<sup>6</sup>On the Palazzo Pichi, see Frommel, 1973, vol. II: pp. 255-261; and Valtieri, 1988: 75-89.

the second floor. An evidence of that is the completion of the pictorial decoration of the rooms on the piano nobile by cardinal Ricci only one year after the acquisition of the palace (1552), which means that these rooms on the second floor were completed by then.<sup>7</sup> U 990 (*fig. 42*) provides some indications of the uses on the piano nobile: the crossed lines over the three central bays on via Giulia mark the sala (main hall), with one “salotto” on each side. Such arrangement is very similar to the palazzo del Vescovo de Cervia, where sala and “salotti” are placed in the same position over the shops and androne below (*fig. 51*).

Another proof that the two wings with shops were defined from the beginning is provided by the other five sheets with plans for Sangallo’s palace: they are all concerned with the design of the courtyard area, not including the shops. Therefore, Sangallo could advance construction while getting more time to think about the articulation of the courtyard and main staircase. Sangallo’s habit of concentrating his efforts in designing the core of the palace (which comprises the sequence of androne/atrium, loggia, courtyard and staircase) rather than thinking in terms of the whole building was already mentioned. This is quite evident in this project. Still on the sheet U 990 (where the shops were defined; *fig. 42*), Sangallo proposes a first arrangement for the courtyard area. The staircase is placed on the right side after the androne, while two narrow rooms are on the left. At the rear part are the courtyard and another room. The courtyard is unclear: the crossed lines and the word “scoperto” (uncovered) indicate the open area, but another idea is explored with a niche as the end of the entrance axis (as in the Casa Sangallo) and the division of the open area with a new wall. On the right side of the sheet, Antonio provides a partial explanation to his plan. Stables are located behind the courtyard (despite the lack of proper access). Room “A” is a secondary dining room

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<sup>7</sup>Andres, 1968: p. 301.



("tinello") on the ground floor, a bedroom on the first mezzanine, a kitchen on the piano nobile and servant's quarters on the upper mezzanine. Room "B" is a space for servants keeping the entrance while "C" is for grain storage. Written information and simple conventions as the crossed lines make this ground floor plan sketch also useful to understand the other levels of the proposed building.<sup>8</sup>

The information provided also reveals some of the weaknesses of this plan. As it had happened in the first proposal for his previous house (U 1315; *fig. 26*), the staircase here has no natural light and ventilation. Moreover, the kitchen is not in a good position, requiring a circulation around the courtyard to reach the "sala." Sangallo shows his dissatisfaction with the solution when he draws the courtyard area on the upper part of the sheet and sketches a new arrangement: room "A" is eliminated and the open court is extended to the right side. On the left, an area for circulation between front and rear sections of the palace and the staircase is provided. The move greatly improves circulation in the building and also solve the problems of the staircase. Sangallo feels the progress and writes on the sketch: "questo sta meglio" (this is better).

Probably the most living expression of Sangallo as a designer at work, the sheet U 984 contains six plan sketches on its "recto" side, and another ten on the "verso" (*figs. 43, 44*). All the 16 sketches are exclusively related to the courtyard area, not including the shops around. As the rows of shops were already defined, Sangallo's only concern here is the design of the courtyard and the staircase, with their implications on the piano nobile above. All sketches have similar dimensions (35 X 75 palmi or 7.82 x 16.76 m) and a similar position for the androne. On the previous drawing (U 990; *fig. 42*), the courtyard was 42 palmi long: why it is reduced now? A possible explanation is found in the only drawing made with the

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<sup>8</sup>Inscriptions transcribed in Frommel, 1973, vol. II: p. 296.

rule in U 984r (*fig. 43*). The drawing is the biggest on the sheet, and presents a duplication of the entrance area (including the main staircase), with a new access on the rear facade. At this moment, Sangallo probably thought about having someone else living in the rear part of his palace: this would certainly reduce the individual costs for the whole building and make construction more viable. The idea recalls again the Palazzo del Vescovo di Cervia (*fig. 51*), which was designed for two owners with two similar entrances on opposite facades. The difference is that the courtyard is not shared in Sangallo's palace. The drawing with the rule might be considered the first on the sheet, and the sketches followed later, as the first would hardly be drawn in an used sheet. Since the longitudinal dimension from the access to the androne to the rear wall is now 35 palmi (compared to 42 palmi in U 990) and all drawings on U 984r and v follow such dimension, one may conclude that Sangallo is working there in a solution for one side of a double entrance.

In the drawing with the rule in U 984r (*fig. 43*), Sangallo returns to the first version in U 990 (*fig. 42*): the staircase is on the bottom of the right side (now with a "cortiletto" to provide light and ventilation) and a room is on the upper right side. The "cortile" becomes very small (about 15 x 20 palmi, or 3.35 x 4.47 m). In the other five sketches on the same sheet (U 984r), the architect plays with the position of the staircase, concentrating it on the left side or against the rear wall or placing it as a complete circuit around the small courtyard (where he adds: "this is good"). One of the schemes recalls the first proposal for the courtyard in U 990, with a niche at the end of the entrance axis (where Sangallo writes: "this one does").

The search for a satisfactory solution is also on the "verso" side of the same sheet (U 984v; *fig. 44*). Among the ten proposals sketched, four are not developed,

presenting only the outline of the area with the staircase. One of the other six alternatives (A) presents Sangallo's early solution introduced in the Palazzo Baldassini: a loggia with central bay opening to the androne and the staircase to the right side, with a small flight aligned to the loggia before the staircase turns left (such alternative for the staircase receives further exploration on the sheet U 985; *fig. 45*). However, this disposition does not work well in this palace, as the remaining area to the right of the staircase would be isolated from the entrance area. Sangallo tries to fix the proposal on the sketch above (B), renouncing the purity of his traditional scheme for a compromise: the courtyard is now off-center and the staircase is placed right after the androne, on the right side. Sketch "C" repeats the basic arrangement of "B" but is left without further definition. Another sketch (D) exploring the same strategy seen in "B" and "C" has the staircase moved to the left side, two columns aligned to the androne and a sequence of spaces to the right, now without the problems of isolation seen in sketches "A," "B" and "C." The initial scheme with the staircase on the lower right side is brought back again in the bigger sketch of U 984v (E), where Sangallo writes: "this is close to good." Finally, the most innovative solution (F) has a niche at the end of the entrance axis and the staircase rising from left to right in a circuit around a small "cortile," keeping open the access to the rooms on the right side. Here Antonio writes: "this is beautiful and good." The scheme might be considered as an evolution of a similar proposal on the upper part of the other side of the sheet (U 984r; *fig. 43*), where Sangallo had written: "this is good." The two sides of U 984 present a unique and very detailed view of Antonio's procedures while designing a building. He defines the limits of the problem and then plays with a few elements (staircase, open area, rooms), generating different arrangements. Some of them are left

undeveloped, while others are completed. As Sangallo draws, he analyzes the results, sometimes adding comments when the solution seems to be good.

The sheet U 1422 (*fig. 46*) presents a preparatory study for Sangallo's final version of the courtyard of his palace. It is easily identified as so in its similarity to the final plan (U 991; *fig. 47*). One important change in relation to the previous studies is immediately perceived: the length of the area now comprises the whole space formerly used for the two entrances (72 palmi). A small scheme with the area is seen on the right side of the sheet. This means that Antonio abandons the double palace conception and now has twice the space available to design the core of his palace. The staircase is placed on the back, with the initial flight aligned to the axis of the androne. The square courtyard is in the middle, with a "Serliana" opening from the circulation area. A room is placed to the right side after the "androne," and smaller rooms occupy the whole extent of the left side of the area.

The sheet U 991 (*fig. 47*) is a drawing with the rule which develops the ideas of the previous plan (U 1422; *fig. 46*). This is the final document about the plan of the building, and Sangallo writes on the sheet: "established in the day of St. John 1545." Except for the transposition from a freehand sketch to a drawing with the rule, there is no significant change from the previous sheet (U 1422) to this one (U 991). The main difference is the substitution of the previous staircase with a short initial flight aligned to the main axis for a conventional two-flight staircase with a unique starting: the first six steps start in an oblique position to the rest and rotate slightly until fitting in the normal pattern of the other steps. The solution loosely recalls the steps of central flight of the Laurentian Library staircase in Florence. Differently from Michelangelo's work, Sangallo employs the unusual steps only in the beginning of the staircase, as a sign of the continuity of the circulation toward

the piano nobile. The square courtyard (30 x 30 palmi or 8.90 x 8.90 m) is probably articulated with four “Serlianas” (three as relief motifs) as the central bay of the portico is larger than the other two. This is a Sangallesque strategy for small courtyards that had been applied with variations in other projects (Palazzo Le Roy, Casa Sangallo, plan for a house in U 1247; *figs.* 31-33, 37, 38), as mentioned before. The use for the room on the right side after the entrance is specified by Antonio: “below, studio; in the middle, kitchen; above, bedroom.” Similar information is provided for the sequence of small rooms on the left side: “in the basement, open; on the ground floor, 15 canne; on the mezzanine, straw and grain.” Previously, the left side rooms were designated for servants and grain storage (U 990; *fig.* 42). Here we know their use above and below, but nothing is said about the ground floor. It is possible to think about rooms for servants being located in this strategic point, to manage the entrance and also the access from stables and other service areas behind. There is another possibility: the presence of a “studio” in the large room on the ground floor might suggest the location of the architect’s workshop here. An obvious defect for this kind of use is the poor illumination of the rooms (which is partly compensated by the absence of walls to get light from the courtyard) and the limited space available. The best alternative is to connect the space to the display of Sangallo’s collection of sculpture and antiquities, which would form an impressive entrance for the palace.

The crossed lines over the left side of the plan show the location of the sala above. Located over the studio, the kitchen now is very well linked to the sala. Therefore, the main hall would be directly connected to the staircase, with no transitional space (usually a second floor loggia). Another curious feature of this sala is its distance from the street elevations, which is very unusual. In fact, the sala

opens only to the small courtyard, not providing any view of the via Giulia or the Tiber river located behind. These are considerable problems if this large room (16.10 x 5.80m) is to be the only hall of the piano nobile. In the built palace, however, there is a large room over the three first bays on the via Giulia (from corner to original androne; *fig. 48*). Measuring 14 x 7.50m, this room was decorated by cardinal Ricci between 1552 and 1553, soon after the purchase of the palace from Sangallo's heirs (1552).<sup>9</sup> Most likely, this sala was delineated early by Sangallo to begin construction of the street wings, when the design of the courtyard was still undefined. This sala is probably the same marked with crossed lines on the first plan for the palace (U 990; *fig. 42*), but dislocated one bay toward the corner. The conclusion is that Sangallo planned two large halls for his palace. Considering that the main facade of the palace faces NE, getting a high amount of solar exposure in the summer, it could be convenient to have a large space opening to a small courtyard and insulated on the sides and above by other rooms and levels. Could this duplication of the sala be classified as an exaggeration? Probably not: 16th century Roman minor palaces without shops generally have a second hall on the ground floor. Such is the case in Sangallo's other minor palaces like the Baldassini and Le Roy. Here Antonio compensates with a second sala above, as the ground floor is filled with shops. The rest of the piano nobile would present a private set of rooms on the vicolo del Cefalo wing and a "salotto" on the right side of the sala facing the via Giulia. On the upper part of U 991 (*fig. 47*), Sangallo informs us of some of the uses on the rear part of the palace: stables, a kitchen, a dining hall for the servants and a storeroom.

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<sup>9</sup>Andres, 1968: pp. 297.

Sangallo habit was to define the basic geometry of a palace and then proceed to focus on a few elements (androne/atrium, loggia, courtyard, staircase, sala) organized in sequence. Such strategy is shown in the architect's most famous palaces, the ones for Melchiorre Baldassini and Alessandro Farnese. The design of his own palace involved some peculiarities which changed the approach: building was started without the final definition of the central area, probably incorporating structures already on site. The two wings along the streets were raised early (1543), while the plan for the core of the palace was defined only two years later. Such circumstances prevented Sangallo from approaching the design of his palace as a whole composition. The typical circumstances of a minor palace commission (financial constraints, use of built structures on site) might have made Antonio less confident in his usual planning strategy and more open to the example of Peruzzi in the Palazzo Pietro Massimo (started 1533). Peruzzi's influence would also explain the extensive use of sketches for the Palazzo Sangallo.<sup>10</sup> Antonio's procedure was to outline a regular plan and then develop it with additions and corrections (seen in the projects for the Palazzo Pucci and Casa Sangallo; *figs.* 26-30). In the design for his new palace, sketches played an important role. No similar set of sketches survive in Sangallo's drawings, we don't know if the architect used them regularly in his practice. Nevertheless, Antonio's sketches are consistent with his method of design: differently from Peruzzi, his sketches are related to a part of the building, and doesn't seem to debate the whole arrangement of it. Rather than rethinking a whole plan, Sangallo prefers to revise an idea focusing on specific parts until exhausting the plan or finding a satisfactory solution. The extant plans for Sangallo's palace provide a unique view of the architect's method, and unfortunately its value is difficult to appreciate given the lack of a complete final

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<sup>10</sup>On Peruzzi's use of sketches, see chapter 3.

plan and any finished drawings. The great enlargement started by cardinal Ricci in 1552 makes the full reconstruction of Sangallo's original project difficult today. Antonio defined the central area of his new palace in 1545, and as he died the following year, most likely nothing of it was ever built.



### CHAPTER 3 - Baldassare Peruzzi & the Palazzo Ricci in Montepulciano

The drawings for the Palazzo Ricci in Montepulciano, designed by Baldassare Peruzzi in 1535 is one of the most interesting set of documents about the planning process of a palace in 16th century Italy. A total of nine sheets preserved in the Uffizi testify about the composition of the palace, ranging from first sketches to finished plans.<sup>1</sup> The Ricci residence almost coincides chronologically with Peruzzi's most famous Roman palace, the Massimo alle Colonne, commissioned in 1533 and already being built in 1535. Both are Peruzzi's final statements in palace architecture, as the Sienese architect died in 1536.

Born in Montepulciano in 1497, Giovanni Ricci was not a member of a wealthy or traditional family. His successful career as a papal officer later brought him to the position of papal treasurer (1550) and cardinal (1552). In 1561 Pius V elevated Montepulciano to cathedral rank and put cardinal Ricci over it. In 1565, he failed to be elected pope only by a few votes. However, it is not as papal treasurer or cardinal that Giovanni Ricci is to be connected with the design of his small palace in Montepulciano. In the early 1530's, Ricci was just starting his ascension in Rome as "maestro di casa" (manager of the palace) of cardinal Del Monte (from Monte San Savino) and soon after he started to work for cardinal Alessandro Farnese in the same function. Elected pope Paul III in 1534, Farnese appointed Ricci as "nunzio" (papal legate) to Spain two years later. At this

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<sup>1</sup>On the Palazzo Ricci, see Andres, 1968: pp. 283-294; and Morganti, Giuseppe. "Palazzo Ricci a Montepulciano" in *Rilievi di fabbriche attribuite a Baldassare Peruzzi*. Siena, 1985: pp. 297-333.

moment, Ricci started an international career that kept him constantly out of Italy until 1550. His distance from Montepulciano during this period might explain why the palace was not finished according to Peruzzi's plans.

As a "maestro di casa," Ricci was working as manager of cardinal palaces in Rome at the time he commissioned his own palace in Montepulciano. Such occupation placed him in a particularly favorable position to appreciate the architecture of contemporary private palaces. In seeing his protector Alessandro Farnese building his monumental residence, Ricci was certainly inspired to build a dignified house for himself in his hometown. Curiously, he hired Peruzzi rather than Antonio da Sangallo the Younger, who was then building the Palazzo Farnese. It is known that the busy Sangallo was never much engaged in his private commissions outside Rome. Usually, he provided a few simple drawings and left execution to local builders, as in the palaces he designed for the Rosati brothers in Fermo (1532; *fig. 58*) or the one for Tiberio Crispo in Orvieto (after 1540; *fig. 61*). Most likely, this kind of procedure would not be convenient or even acceptable to Giovanni Ricci, a man well acquainted with contemporary palace architecture and who was then just starting a career of building enterprises for himself. Peruzzi was probably more available not only to design the palace but also to visit the site and supervise construction. After all, Montepulciano is very close to Siena, Peruzzi's hometown and place of his constant activity. As Ricci was sent to Spain in 1536 and Peruzzi died in January of the same year, the contacts between client and architect should have occurred in 1535.

Studies of this project have concentrated in the discussion of Peruzzi's authorship of the built structure rather than on the drawings of the architect for it. In fact, there are only slight resemblances between the drawings and the structure built after Peruzzi's death in Montepulciano (see *figs. 66, 67*). However, the

drawings for the Palazzo Ricci illustrate the progress of Peruzzi's design with much detail. The sheets U 355v contains one plan sketch for the palace, and the sheet U 359r presents eight sketches of plans, for a total of nine (*figs. 68, 69*). Out of these initial ideas, Peruzzi develops three plans into finished drawings (U 355r, U 356r, U 357r; *figs. 70-72*), which are alternatives to be presented to the client. It seems that Giovanni Ricci acquired additional land soon after these alternatives were completed; therefore, Peruzzi sketched six new plans for the enlarged plot in U 356v and U 594r (*figs. 73, 74*). Later, two alternatives were developed into finished drawings (U 358r, U 595r; *figs. 75, 76*).

### **The first project for the Palazzo Ricci**

The plot owned by Giovanni Ricci in Montepulciano was located very close to the main "piazza" of the town (*fig. 65*). The street in front of the site (the present-day via Ricci) is called in Peruzzi's plans "via che va a la piazza." On the back side of the plot is the "via di San Martino" (today vicolo Ricci). The via Ricci level is 12.50 meters higher than the street behind, and the land falls this distance in only 30 meters. The difficult topography required complex engineering work in order to create an artificial platform for the palace leveled to via Ricci. In fact, two levels of substructures were built, comprising an intermediate floor and an impressive "cantina" below (*fig. 67*). Such lower space has a "nave" and two "aisles" defined by groin vaults on arches supported by pillars more than eight meters high. Design and technology here would lead to an attribution to Peruzzi, a distinguished painter, architect and engineer. No drawings or documents relate these substructures to him, but in order to draw his plans for the palace, Peruzzi certainly considered how to solve the problem of the difference of level in the plot.

As the substructures must have been the first parts to be built, they probably reflect Peruzzi's conception better than the other parts which were built later.

Peruzzi starts planning for a small plot with an area of 550 m<sup>2</sup>.<sup>2</sup> Eight plan sketches are drawn in U 359 and one in U 355v: all are simple schemes without measurements or written information (*fig. 68*). The architect already had the shape of the plot in his mind, and so was able to draw it freehand many times turning the sheet around.<sup>3</sup> Peruzzi drew simple lines to articulate the spaces on the ground floor and afterwards stressed the lines corresponding to the walls. He probably begins with a sketch such as "A" (*fig. 68*), which was left incomplete. In a second moment, the walls are stressed on the plan. All the operation probably took just a few minutes for each plan sketch. The elements of composition are quite clear: a set of rooms in front, a courtyard with loggia connected to the staircase behind and service rooms and a "giardino pensile" (hanging garden) on the back. Apart from the garden, these are standard elements of a minor palace program. Levels above and below are being considered at this point, but will only be revealed later, on the finished plans.

The diversity of solutions is impressive: there is no fixed scheme in Peruzzi's mind. His proposals explore a wide variety of arrangements, and the list below present some of their different features (see *figs. 68, 69*):

- front section with short "andito" and one room on each side (plans 4, 7);
- front section with long "andito" and two rooms on each side (pl. 2, 3, 5, 6);
- front section with small atrium and one room on each side (plan 1);

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<sup>2</sup>Approximate size according to drawing U 357: 15.10 x 24.50 x 22 x 34.10 m

<sup>3</sup>It is interesting to compare the different orientations of Peruzzi's sketches in U 359 and the ordered disposition (side by side in rows) of Palladio's sketches in RIBA XI/22v (*fig. 89*).

- front section with long atrium and two rooms on each side (plan 9);
- front section with entrance on left side and four rooms on right side (pl. 8);
- central courtyard with one loggia linking to staircase (plans 1, 4, 8);
- small side courtyard with loggia as continuation of the “andito” (plan 3);
- large side courtyard with two loggias (plan 6);
- large side courtyard with three loggias (plan 7);
- large courtyard with apse and two loggias, one linked to staircase (plan 2).

This short list of a technical character is far from exhausting the whole range of inventiveness comprised in these sketches. The schemes no. 1 and no. 4 (*fig. 68*) could be called “Sangallesque” due to their similarity to Antonio’s model defined in the Palazzo Baldassini (started 1514-16) and much adopted in 16th century Rome (*fig. 31*). Both plans present a small central courtyard with one loggia linking entrance axis and main staircase. The difference is that plan no. 1 has an atrium as entrance space, and no. 4 presents the more traditional “andito.” Plan no. 2 has a courtyard with an apsidal termination, a “basilical” solution introduced in Raphael’s own house on the via Giulia (1520; *fig. 8*), also used by Sangallo in his first house (1535; *figs. 26-28*), which was designed at the same time Peruzzi was planning the Palazzo Ricci. Being partners in the work of St. Peter’s at that time, both architects might have had some opportunities to exchange ideas about palace design. The plan no. 5 is a less complete version of plan no. 2. Plans no. 3, 6 and 7 present an “andito” followed by a side courtyard which varies in size and number of loggias (one, two or three). Plan no. 8 appears to be the most unconventional proposal, where even the use of a centralized axis of access is put aside. A very long “andito” goes all the way from street entrance to the end of the plot, crossing rooms and courtyard to end in a kind of “apse.” The lack of a centralized entrance

would make the facade of the Palazzo Pucci similar to a “casa,” where the access was usually by one of the extreme bays. The plan no. 9 was drawn with a pencil in another sheet (U 355v; *fig. 69*) and is hardly visible today. Its front section presents a large atrium, linking courtyard and street facade, with two rooms on each side. Such atrium is usually corresponded by the sala on the piano nobile (as in Peruzzi’s Palazzo Massimo), in a plan structure that recalls the Venetian palaces. The courtyard in sketch no. 9 has three sides with loggias.

Through his quick small sketches that simplify many of the complexities of an executive project, Peruzzi could release his creative powers and concentrate exclusively on architectural composition. Because the architect knows the program of the building and controls the dimensional aspects of the plot, he is free to sketch multiple alternatives, exploring different arrangements of the spaces. At a certain point, Peruzzi must have felt that the stage was exhausted, and then he started to check his alternatives in order to develop some of them into finished plans. Therefore, three drawings are produced as alternatives to be shown to Giovanni Ricci. There is no indication of a progress from one alternative to the other, and the fact that Peruzzi designates them as “A,” “B,” and “C” reinforces the impression that they were developed as alternatives (*figs. 70-72*). As will be seen, the plans show three different approaches to the composition of the palace, developed by the architect to be compared with each other. In these three plans, the architect “squared” the plot by assuming a right angle on the corner at the left side of the main facade. In fact, the sheet U 356 (plan “B”; *fig. 71*) presents Giovanni Ricci’s actual plot marked with dotted lines on the left side. The profile is very irregular, and Peruzzi’s proposals presuppose some kind of future arrangement to straighten the left side of the plot. In fact, this is assumed since the sketch stage. The plot’s configuration shows an additional difficulty: the main facade on via

Ricci is the narrower of the four sides (15 m long), creating problems to accommodate the largest areas of the palace, which are always located between courtyard and street (as the main hall (*sala*), other ceremonial areas and the owner's "appartamento"). This is a common problem in minor palace planning.<sup>4</sup>

Being located on a slope, with one side facing a street of a small town and the other offering a panoramic view of the countryside around the city, the Palazzo Ricci would not be similar to a small palace located in a flat site in the middle of a dense urban area (as most small palaces in Rome). This kind of geography of the plot generates a specific type of plan which puts together elements of the urban palace and of the countryside villa. It would not be correct to define the Palazzo Ricci as a "suburban villa," due to its location in the middle of the urban fabric and very close to Montepulciano's main piazza. But surely this is a palace with features of a villa (openness to view on the back, presence of a rear garden, large cellars in the substructures). Such configuration of the plan for palaces in small hill towns was not new, being found in the vicinity of Montepulciano in the large Palazzo Piccolomini (Pienza, 1459-62) and in some palaces by Antonio da Sangallo the Younger such as the Farratini (Amelia, 1520-25; *fig. 62*), Girolamo and Giovan Francesco Rosati (Fermo, 1532; *fig. 60*), and later the Palazzo Crispo in Orvieto (c. 1540; *fig. 61*). Moreover, Peruzzi used a similar strategy (projecting wings on sides with a portico in the middle, looking to a garden) in two of his Roman residences: the Villa Farnesina (1505) and the Palazzo Fusconi-Pighini (before 1527; *fig. 80*).

The plan "A" (U 355r; *fig. 70*) is related to the sketches no. 6 (but with a smaller courtyard) and no. 3 (here with courtyard moved to the right side). Drawn

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<sup>4</sup>Some examples of facade extension of minor palaces: Baldassini: 26 m; A. Massimo: 22.80 m; Casa Sangallo: 18.70 m; Ossoli: 17.50 m; Gaddi: 14.50 m.

with a rule and in much larger scale compared to the sketches, this plan contains complete dimensional data and much information about uses on the ground floor and on the piano nobile. The “parti” proposes an occupation of the plot with an “L” shaped volume. The main facade is subdivided in five bays. The front part of the building has a long “andito” dividing two sets of rooms. On the right side, there seems to be a complete summer apartment for the owner, with a large “camera” for audiences, an “anticamera” and a “studio” (which includes sanitary facilities). Thicker walls and less sunlight exposition made ground floors suitable for summer apartments. On the left side, the two rooms could serve as a small apartment for guests. In fact, both sides could serve as quarters for guests, according to their standing. In his “De Cardinalatu,” Paolo Cortesi recommends the location of guest rooms on the ground floor, “in order to allow the guests privacy and freedom of action apart from the cardinal household, and to place them in that part of the house which is closer to the door for greater ease and coming and going.”<sup>5</sup> This kind of practical counsel (which probably reflects contemporary practice) was useful for large and small palaces alike. The piano nobile above presents a similar arrangement in terms of rooms: the only difference is that the sala comprises three bays (room on right side plus androne), measuring 8.50 x 6.00 m. In terms of size, this is a humble sala, being much smaller than the ones in other contemporary minor palaces, like the Baldassini (14.00 x 8.00 m), the Angelo Massimo (12.80 x 7.70 m) and the Pietro Massimo (13.50 x 10.00 m). The difference may reflect different spatial and social needs in Rome and in Montepulciano. The other rooms around the sala constitute the “appartamento” of Giovanni Ricci.

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<sup>5</sup>Cortesi, 1980: p. 79.



Following the “andito,” the visitor reaches the courtyard on the right side and the staircase on the left. The courtyard is a small square measuring nine meters on each side, with one portico with two columns and two terminal pilasters. The other three sides receive relief pilasters set at equal intervals. A well framed by a niche marks the end of the transversal axis of the courtyard. Except for its position on the side of the main axis, this geometrically regular and disciplined classical courtyard would certainly please Sangallo the Younger. The main staircase is on the left, and it is surprisingly narrow: just 1.35 m, compared to an average width of 2.00 m per flight in Roman minor palaces. Sangallo’s staircases for small town palaces in Amelia, Castro and Fermo maintain the same average width of Rome. Most likely, the sense of importance of the staircase as a ceremonial space didn’t allow Sangallo to design it smaller, while Peruzzi’s approach was less rigid. Here the staircase is placed around a small court that duplicates a function already performed by the main courtyard. Peruzzi probably wanted to keep the staircase out of the courtyard, to avoid interference with the classical articulation of its walls. The use of a central light well improves lighting, but forced the reduction of the width of the flights. However, the real reason for the little court might be the room before the staircase, which has no direct source of light and ventilation. All these problems reveal the need of further adjustments in this plan, and manifest the increasing complexity as Peruzzi proceeds from sketches to a finished plan intended for execution. On the rear, two service rooms (a kitchen and a “camera”) complete the long left wing, while the garden is placed on the back of the courtyard. Latrines are ingeniously inserted in the remaining areas created between the regular geometry of the rooms and the oblique profile of the plot.

The second finished plan in the sequence is on the sheet U 356, marked by Peruzzi as plan “B” (*fig. 71*). The source for this plan is found in the sketch no. 9 (*fig. 69*), where the front part has a long atrium with two rooms on each side, with a “Venetian” arrangement for the sala on the piano nobile, through which courtyard and street views are connected in a single space. Such longitudinal arrangement of the sala was very convenient for narrow urban plots which were always much longer than wider, being adopted by Peruzzi in the Palazzo Pietro Massimo in Rome (*fig. 83*) and also by Sangallo in two plans for his house on the via Giulia (*figs. 27, 28*). As a result, the small sala of plan “A” is now enlarged from 8.50 x 6.00 m to 10.00 x 6.00 m (51 to 60 m<sup>2</sup>) on plan “B.” It is still a small main hall when compared with others in Roman small palaces: compared to Peruzzi’s plan “B,” the Palazzo Angelo Massimo has a smaller ground floor area (467 m<sup>2</sup>) with a sala of 98 m<sup>2</sup>. The limited gain reflects the difficulties in dealing with the narrow plot: a wider sala here would make the four side rooms too narrow. The front section reveals another interesting innovation: in this proposal, Peruzzi changes the facade of the palace from five to seven bays. Such number of bays is unusual in a facade only 15 m wide, and would create an elevation of numerous small windows (the facade of Sansovino’s Palazzo Gaddi in Rome is 14.50 m long, being subdivided in only three bays. On the other hand, a greater number of bays could give a more impressive effect of grandeur to the narrow facade of a minor palace, pleasing the client.

In the sketch connected to this plan (U 355v; *fig. 69*), the courtyard is placed in the middle after the atrium, with at least two loggias and rooms on both sides. Later, when Peruzzi was drawing the finished plans, he became conscious of the limited width of the plot and so avoided a central courtyard with two side wings. Therefore, in plan “B” he chooses to locate the courtyard on the axis of the

central bay of the facade, and the rear wing with staircase and kitchen is moved to the right side. Moreover, the courtyard is larger (10 x 10 m plus two long loggias). Despite the axial organization of portal, atrium and courtyard, Peruzzi shows disregard for the explicit discipline typical of Sangallo: his courtyard has loggias on two sides but no pilasters responding to them in the other walls. Therefore, the sense of biaxial symmetry vanishes when the visitor reaches the “cortile.” The use of pilasters would be simple on the right side wall, as the five windows open in exact correspondence to the intercolumniations. The central bays of the loggias are wider than the others, suggesting the presence of “Serlianas” there (an arch on the central bay and trabeation on the sides). Is it possible to believe that Peruzzi is simply leaving two plain walls in this courtyard, including the rear wall where the main axis ends after crossing the “Serliana?” Most likely, the wall separating courtyard and garden was not to be very high (probably one story high or less), because it is not as thick as the other walls. Peruzzi might have thought about displaying some of the garden and the panoramic view to the visitor entering the palace. As a consequence, the dissolution of symmetry would be complete: the view from the loggia after the atrium would present a columnar portico on the left side, a wall with windows on the right side and a low wall with a panoramic view in front.

It is difficult to know about the vertical development of the palace, as no sections or elevations remain. The plans provide information about two floors in the front section, which were probably followed by an attic (as in the built palace). But nothing is said about the rear part. In plans “A” and “B” (*figs. 70, 71*), the staircase not only reaches the piano nobile but also provides access to the kitchen on the back. Therefore, it is possible to conclude that the rear wing of both proposals was planned to have the same height of the front part (two floors plus an

attic). Here in plan “B,” Peruzzi extends the loggia on the left side providing a covered access to the garden. Most likely, this side of the loggia was restricted to the ground floor. The efficient arrangement of the front rooms, the clear separation of private-ceremonial front block and service areas in the right wing on the back and the provision of a large courtyard allowing ample vision of the surrounding countryside suggest that this proposal may be considered the most successful of the three.

The Sheet U 357 presents Peruzzi’s alternative “C” for the Palazzo Ricci (*fig. 72*). This proposal can be related to sketch no. 3 (*fig. 68*), with the courtyard on the right side of the androne rather than the left. At the first sight, one perceives the more “compact” nature of this plan. Courtyard and garden are now separated from each other, and the first is “encircled” by the rooms of the palace. The distinction between front (closed) and rear (open) is not present anymore, and the palace assumes an “urban” typology (rooms gravitating around the courtyard), losing any connection to villa planning. Consequently, the rooms located in the front lost the panoramic view through the courtyard. Peruzzi structures the plan through a long “andito” running from entrance to rear garden and passing by the courtyard, which is in the middle. Such scheme is similar to the plan for the Palazzo Pietro Massimo in Rome, designed by Peruzzi about two years before the Palazzo Ricci. The problem is that the plot here is much narrower, and the accommodation of the rooms becomes complicated. The staircase continues to be very narrow and without intermediate landings, these being constant features on the three finished plans. The courtyard is the smallest of the three (6.25 x 6.25 m), having one portico and three sides with pilasters. Above, the sala is also the smallest of all, having dimensions of 8.50 x 5.60 m. The concentration of rooms

around a small courtyard creates further problems: the second room on the left side receives few air and natural light, and the conditions for the third room are not much better. All these problems seem to be enough to define this proposal as the less satisfactory of the three.

Peruzzi's plan "C" presents some peculiarities. The architect writes in the plan about two other possibilities of locating the staircase and so enlarging the courtyard. One alternative location is in the third room on the left, from bottom to top. However, in such place the staircase would be poorly lit and ventilated. The second alternative is to put the stairs in the kitchen (the last room on the right side of the androne). Such position is probably the best of the three, but it would not improve the proposal as a whole. Another peculiar feature is the long "andito" that crosses the whole building longitudinally. This "andito" is articulated by pilasters in all of its extension, with the addition of four niches in both ends. Therefore, the central role of the "andito" as a spine for circulation and compositional organization of the palace is manifested in its classical characterization.

### **The second project for the Palazzo Ricci**

After the three proposals above mentioned were finished, Peruzzi started to draw a new set of plan sketches for the Palazzo Ricci. Apparently, Giovanni Ricci decided to purchase additional land to build a larger palace. It is possible that in examining the three alternatives presented by his architect, Ricci came to the conclusion that his plot was too narrow to allow Peruzzi to design something impressive. Such conclusion could also be the result of a conversation about the drawings between architect and client. However, no documents are available to

clarify the transition between the first and second projects. The fact is that after making drawings for a smaller plot, Peruzzi starts a new set of sketches and finished drawings for a larger plot on the same location. The ground floor area available now is 740 m<sup>2</sup>, or more than 1/3 bigger than the previous area (550 m<sup>2</sup>). The addition of land enlarge the extension of the main facade, which allows for a better distribution of rooms in the front.

Following the procedure employed for the first set of drawings, Peruzzi starts to study the plan for the new plot by drawing small sketches. Two of them are found on the sheet U 356v, while five others are on U 594 (*figs. 73, 74*). The two sketches of the first sheet are probably first thoughts, and both can be connected with sketches no. 1 and 5 in U 594 (*fig. 74*), as the evolution of a similar conception. Peruzzi used the back of a sheet with one of his former proposals (plan “B” on U 356r) for the same palace to start sketching a new version. Generally, the sketches in U 594 (*fig. 74*) follow the ideas already presented for the first project. Therefore, plan no. 1 has the *androne* crossing two rows of rooms and reaching a central courtyard with one *loggia*; plan no. 2 was not developed, presenting only the outline of the plot and the front section with “*andito*” and one row of rooms; plan no. 3 retakes the idea of the “Venetian” plan, with a large longitudinal atrium with two rooms on each side. Plan no. 4 represents the “compact” or “urban” alternative: the courtyard is isolated from the view on the back and the palace becomes a self-contained block with rooms articulated around a central opening. Now, as more space is available, this alternative receives a complete peristyle around the courtyard. Finally, plan no. 5 retakes the arrangement of plan no. 1 and gives it more precision. This is the most developed sketch: it includes some dimensions and shows a few details such as the articulation of the courtyard (with

loggia, pilasters and niches) and the curious facade with receding panels carved in the wall between the windows.

The summary of this stage of Peruzzi's planning is that he creates three basic alternatives for the Palazzo Ricci. The first is the proposal with "andito" and two rows of rooms in front, which comprises four sketches. The second is the plan with the large entrance atrium, and the third is the compact plan developed around an enclosed courtyard. This is a smaller number of proposals in comparison with the nine alternatives for the first project. The sketches for the enlarged plot also show less variation in the position of the staircase, which is always on the left side, connected to the courtyard loggia. Most likely, Peruzzi took in consideration the previous work of creation and selection, being now more focused in the selection of basic arrangements. Indeed the three basic proposals defined in the second set of sketches correspond exactly with the arrangement of the three finished plans for the first plot: the "andito" plan (A), the atrium or "Venetian" plan (B) and the "compact" plan (C).

Peruzzi prepared two finished plans for the larger plot. One of these drawings (U 358; *fig. 75*) is similar in nature to the three finished plans for the first project, having the walls washed, presenting the dimensions of each space and also providing some written information. The other drawing (U 595; *fig. 76*) is different because it lacks any numbers or writing. As the Palazzo Ricci was designed in 1535 and Peruzzi died in January 1536, it is possible to think that he died without completing this second drawing. However, once dimensions are compared, the incomplete drawing shows a street facade that is smaller (21.50 m) than the complete drawing (25 m). The other three sides are very similar in the two plans. In fact, the difference is in the upper left corner angle of the plot: while in U 358 it

is close to a straight angle, in U 595 it is clearly acute. What do these differences mean? One possibility is that during the process of designing the building, an additional strip of land becomes available to “straighten” the plot a little bit.

The plan in U 358 (*fig. 75*) provides more elements for analysis. With 25 meters of extension for his facade, Peruzzi divides it in nine small bays. In Rome, minor palaces with a similar extension of facade never have more than seven bays. Some examples are the Palazzo Angelo Massimo (22.80 m, five bays), Palazzo Baldassini (26 m, seven bays) and Palazzo Pietro Massimo (27 m, seven bays). As seen before in plan “C” for the smaller plot (*fig. 72*), more bays here would make the palace look more monumental. On the practical side, Peruzzi had to choose between only one window for each room facing the street, or two smaller windows. The second option was chosen because it provides a better impression and better lighting.

The disposition of the ground floor is similar to the sketch no. 5 (*fig. 74*): a long androne crosses two rows of rooms to reach a large courtyard with a single loggia. Now Peruzzi has ample space on both sides of the entrance for eight rooms composing four sets of “camera” with respective “anticamera.” These rooms could be used for audiences, special meetings, a library and also to lodge visitors. Their location on the ground floor also make them appropriate for a summer apartment. Differently from plan “A” of the first project (U 355r; *fig. 70*) where Peruzzi defines a group of rooms with “camera,” “anticamera” and “studio,” this drawing does not provide any clue to the location of a summer apartment for Giovanni Ricci. On the back, the disposition is similar to the sketch no. 5, with some changes: the staircase was transferred to the right side and the rear wall lost the articulation with niches, being replaced by a low wall (probably allowing an impressive vista for a visitor on leaving the androne and entering the courtyard).



The kitchen is located in the left wing, connected to the well, to a rear room (probably for storage), to the service staircase and also to the front rooms. The staircase flights are wider than the previous ones (1.60 m, compared to 1.34 m in the first set of proposals), but the stair is still planned without any landings. The courtyard is much larger than the previous ones, measuring 19 x 10 meters. Concerning the courtyard, there is an important innovation: it is now called “orto pensile” or hanging garden, combining the functions of “cortile” and garden that were separated before. Planning a larger palace, Peruzzi felt the need to integrate the two open areas of the previous proposals in a single larger courtyard.

Peruzzi provides information regarding the location of the sala on the level above. The graphic convention he uses is very interesting: the walls that are not continued above in the space of the sala are represented in dotted lines, and the thickness of these walls is not washed. Peruzzi adds short sentences explaining the arrangement. The convention adopted is very effective in this kind of plan, allowing the easy understanding of the two different floors in one single drawing. It also explains the lack of second floor plans in this project). The innovative system of representation points out to a peculiarity of this plan: it combines the arrangement with “andito” (on the ground floor) with the “Venetian” plan (on the piano nobile), which usually presented an atrium below. Here Peruzzi creates a new proposal by synthesizing the virtues of two different compositions previously sketched. On the piano nobile, the large 7-bay loggia (19 m long) offers a magnificent view of the surrounding countryside. The new sala measures 11.30 x 7.70 m, which is a significant gain compared to the biggest one on the first set of alternatives (10 x 6 m). On the right side, the four rooms would provide a spacious “appartamento” for Giovanni Ricci, while the two rooms on the left extreme would serve as supportive space for the social activities taking place in the sala.

The other proposal for the enlarged plot is found in U 595 (*fig. 76*). As stated above, there are no dimensions or written information on the sheet. However, dimensions can be easily grasped, as Peruzzi uses an orthogonal grid to locate the elements of composition and provides a scale in the “braccio di Montepulciano” (c. 0.60 m) on the bottom of the sheet. In fact, the orthogonal grid was used in all finished plans for the Palazzo Ricci, and the scale is also found in some of the previous drawings (U 355, U 356, U 357 and U 358; *figs. 70-72, 75*). This plan is also a synthesis of previous ideas which creates a new one. Peruzzi establishes one row of rooms in the front section, but replaces the androne (usually connected to this scheme) with an entrance atrium, now developed transversally and comprising three bays. The sala on the floor above corresponds to the atrium below, and it is now much smaller (8.90 x 6.30 m) than the sala on the previous plan. The square courtyard is the largest of all proposals (15 x 15 m), and contrasts with the previous plan in receiving a complete classical articulation (loggia with columns plus pilasters applied to the other three walls) and in reintroducing the niches in the rear wall. With the reduction of the front section, both rear wings get an additional room.

Peruzzi's plan arrangement here (U 595; *fig. 76*) reduces the size of the front section to add more rooms in the rear wings and have a large square courtyard. The front section of the second proposal has fewer rooms (six, compared to 15 on the first plan) and a much smaller “sala.” The addition of rooms on the back do not compensate directly the loss of space in the noble areas of the palace (owner's apartment, reception rooms, guest rooms). On the other hand, Giovanni Ricci might have found the larger plan too large and costly. Therefore, Peruzzi might have provided this plan as a simplified alternative of the project previously seen (U 358; *fig. 75*). Another curiosity is that this plan (U 595; *fig. 76*) is the closest to the

arrangement which was finally built (*fig. 66*). The fact may indicate that Peruzzi's incomplete plan reflected the last discussions with Giovanni Ricci for the preparation of a final plan.

These two plans mark the conclusion of Peruzzi's process of design investigation for Giovanni Ricci's palace in Montepulciano. The preservation of this set of plans telling so much about the process of planning of one specific building suggests that Peruzzi intended more with the drawings than simply attending the requirements of a commission. In fact, these sheets can be seen as a guide for planning a minor palace, from rapid sketches to finished drawings. Unfortunately, very few of Peruzzi's conception for the Palazzo Ricci can be recognized in the building erected after his death in Montepulciano.

## **CHAPTER 4 - Andrea Palladio: sketches and alternative plans for small palaces**

Andrea Palladio's career expresses, in conjunction with Antonio da Sangallo the Younger, the affirmation of the professional architect in 16th century Italy. In contrast with other Renaissance architects, they were not artists, nor were they intellectuals, but came from the building trades (Antonio was a woodworker and Andrea, a stone carver). Sangallo first learned architecture with his uncle Giuliano da Sangallo and later with Bramante and Raphael in the workshop of St. Peter's, Rome. Palladio was trained by intellectuals such as Giangiorgio Trissino and Daniele Barbaro, aiming at transforming him into their architect. These two architects distinguished themselves in the single branch of art with which they were concerned: architectural drawing. Finally, Sangallo and Palladio devoted a significant part of their professional activity taking commissions from private clients. Sangallo left more than twenty projects for private palaces in Rome and the Papal States, and Palladio left a similar number of projects for urban residences in Vicenza and other parts of the Venetian Republic.

It would seem that the context for Palladio's domestic urban architecture is completely different from the Roman scene, where Sangallo and Peruzzi's architecture was developed. Geography, economy, cultural traditions and social structure were very different in Vicenza and Rome. However, a closer look demonstrates the existence of many common traits. In 1550, the population of Rome was about 45.000, compared to 30.000 in Vicenza.<sup>1</sup> At that time, both cities were recovering from great disasters: in 1509, almost the whole Venetian "terraferma" (including Vicenza) was taken by the troops of the League of

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<sup>1</sup>Data from Burke, 1972: p. 253.

Cambrai, and only in 1517 did Venice completed the recovery of its former territories. Ten years later (1527), Rome was sacked by the Imperial troops of Charles V. The social and economic structures were very different: there was nothing comparable to the Roman “lesser nobility” in Vicenza, as the papal civil service was fundamental for its existence. Such class of professional men, bankers and merchants was responsible for a large part of the private building activity in 16th century Rome. On the other hand, Ackerman says that in Vicenza “citizens, members of the professional, civil servant and merchant classes, largely disfranchised, were rarely responsible for the patronage of major buildings.”<sup>2</sup> The province of the Vicentino was prosperous, and its agricultural wealth was frequently mentioned in the reports of the Venetian local governors. The silk and wool industry was also important in Vicenza: one of Palladio’s patrons, Marc’Antonio Thiene, was a landowner and trader of silk in international markets through Venetian banks.<sup>3</sup>

Vicenza was administered by governors sent from Venice, but the local council was very influential, due to the political power of the Vicentine nobility. These nobles were powerful because they owned most of the productive land of their province, in contrast to the regions of Padua and Treviso, where Venetians owned large portions of the land.<sup>4</sup> A high proportion of these nobles composing the city council had doctorates, and intellectual and cultural life was flourishing in the city, culminating with the opening of the “Accademia Olimpica” in 1555. Such

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<sup>2</sup>Ackerman, James. “Palladio revisited I: civic architecture” in *Spazio e Società*, vol. 6, n. 21(1983): p. 11.

<sup>3</sup>Burns, Howard et al. *Andrea Palladio: the portico and the farmyard: 1508-1580*. London, 1975: pp. 9-12.

<sup>4</sup>Burns, 1975: pp. 9-11.

well-educated nobility was willing to express itself through “modern” architecture. Between 1538 and 1542, the most important and famous architects in the Veneto and surrounding areas were invited for advice on the rebuilding of the Basilica, the seat of the city council and symbol of Vicenza’s civic pride. One after the other, Serlio, Sansovino, Sanmicheli and Giulio Romano were brought to town, but their proposals were not accepted. Finally, in 1549, Palladio’s design was approved for construction.

The noble families of Vicenza (Porto, Thiene, Valmarana, Barbarano, Chiericati, etc.) constituted Palladio’s local clientele, giving him many commissions of urban palaces and villas. Most of the private palaces Palladio designed for Vicenza are similar in size to the minor palaces previously seen in early 16th century Rome. Therefore, the educated nobility of Vicenza can be compared to the Roman lesser nobility in terms of creating a similar demand for smaller urban palaces in the classical style. The Vicentine nobility had important direct ties to Rome: Giangiorgio Trissino and Daniele Barbaro introduced Palladio to the cultural circles of Rome, and other nobles also took part in these journeys, such as Marc’Antonio Thiene. Another Vicentine, Paolo Almerico, held the important office of papal referendary during the reign of Pius IV (1559-65). When returning from Rome to Vicenza, he asked Palladio to design his suburban villa (the “Rotonda”).

Concerning architecture, Palladio had an important role in putting Rome and Vicenza closer. The architect visited Rome five times (1541, 1545, 1546-47, 1549 and 1554), and he always had access to the important circles of the papal capital. In Rome, Palladio saw the recent works of Bramante, Raphael and Sangallo and also examined in detail the monuments of Ancient Rome, being particularly impressed with the spatial articulation and ornamental sobriety of the baths.

Concerning minor palaces, Palladio creates a new formula: he combines a new flexibility with the classical language with a mastery of inexpensive materials and techniques. Making columns with bricks covered with plaster and walls decorated with drafted masonry, Palladio “was finally in a position to evoke, in his small Vicenza, the monumental splendor of Ancient Rome, and this technique allowed him to get much closer to the famous ancient prototypes, compared to what Bramante and Raphael have achieved in Rome and Sansovino in Venice.”<sup>5</sup>

### Palaces in Vicenza before Palladio

Palace architecture in the Venetian Terraferma followed the Venetian traditions. Despite the contextual differences in mainland towns (where conventional streets prevailed rather than the Venetian canals), the typical plan of 15th century palaces of the capital prevailed in towns such as Vicenza and Padua (fig. 85).<sup>6</sup> McAndrew describes the Early Renaissance Venetian plan in these terms:

*Having to be fitted into the peculiar Venetian net of canals and streets, houses were usually narrow in front, and deep. Rooms ran along either side of a long hall down the middle of the building. On the ground floor this led from a water entrance on the front to a land entrance in back. This typical Venetian “androne” or “portego” was unlike anything in Florence, Rome or Milan . . . In the Early Renaissance, the simpler, regular schemes were preferred, with a plain “androne” running straight through the building. The stairway, on*

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<sup>5</sup>Frommel, Christop. “Roma e la formazione architettonica del Palladio” in *Andrea Palladio: nuovi contributi*. Milano, 1990: p. 156.

<sup>6</sup>On Venetian palace architecture at this time, see McAndrew, 1980: pp. 194-235, 321-357; on 15th and early 16th palace architecture in Padua and Vicenza, see Cevese, 1990: pp. 83-96.

*one or, more usually, two straight flights between straight supporting walls, was moved indoors, to open off the “androne” near the middle of the house.<sup>7</sup>*

Cellars were absolutely impossible on the muddy soil of Venice. Therefore, much of the ground floor of a palace was used as storage area (even the “portego,” where people pass to go to the sala on the piano nobile, was used for that). Some front rooms could be used as offices, and rear rooms could serve as servant’s quarters. The same tripartite arrangement of plan was repeated on the piano nobile, where the center hall (sala) opened to suites of rooms on either side. The long sala required wide openings on both extremes in order to get enough natural light. Most bedrooms were located on the third floor, while the owner’s bedroom could be placed on the front part of the piano nobile. The smaller palaces had a plan with only two divisions: the long “portego/sala” unit and a single wing with rooms, generating an asymmetric facade (*fig. 86*).

In Vicenza, this traditional arrangement was maintained in the late 15th and early 16th centuries. Plan schemes having three longitudinal sections with the long hall in the center are present in palaces such as the Garzadori in contra’ Piancoli, Monza Regaù and Thiene in contra’ Porti (*fig. 88*). The smaller version with only two subdivisions is illustrated by palaces such as the Valmarana a Santa Corona, Arnaldi-Bertevello and Arnaldi-Piccoli in contra’ Pasini and Vigna in contra’ della Cadena (*figs. 86-88*). Architects working in Vicenza by the end of the 15th century (such as Lorenzo da Bologna) introduced facades with classical elements, and sometimes tried to make their articulation as symmetrical as possible (as in the palazzi Negri di Salvi in Santo Stefano and Alidosio in corso Palladio).

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<sup>7</sup>McAndrew, 1980: pp. 195, 197.



However, they introduced no substantial change in the basic structure of the Venetian plan.

### **Palladio's initial sketches for palaces**

Palladio is responsible for the design of more than twenty identifiable urban palaces, most of them in Vicenza. A good number of these projects were built, and many were documented in the second book of Palladio's treatise on architecture, "*I Quattro Libri dell' Architettura*," published in 1570.<sup>8</sup> Moreover, a large number of Palladio's drawings has survived, including many plans and elevations for palace commissions. In spite of that, very few design sketches by him remain today. As Burns has argued, collectors of drawings or even the architect himself were probably more interested in preserving finished drawings rather than design sketches, which were certainly made in large number by Palladio.<sup>9</sup> The same remark applies to Sangallo and Peruzzi's drawing collections available today, and this fact represents the greatest difficulty in reconstructing the planning strategies developed by these architects.

Fortunately, some initial sketches survived because they were made on sheets with other drawings considered "important," and these sketches provide the evidence needed to study Palladio's methods of architectural planning. Most of the remaining plan sketches are for villas (villas Mocenigo, Arnaldi, Thiene, Pisani a

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<sup>8</sup>Palladio, Andrea. *I Quattro Libri dell'Architettura*. Venice, 1570 (facsimile: Milan, 1980). English edition: *The four books on architecture*, transl. by Tavernor & Schofield. Cambridge, 1997.

<sup>9</sup>Burns, 1982: p. 73.

Bagnolo, Caldogno, Barbaro).<sup>10</sup> Fewer drawings of this kind survive for urban palaces. In fact, only four of Palladio's sheets contain plan sketches for palaces: RIBA XVII/12v (three small sketch studies for the entrance block of Palazzo Thiene), RIBA XIV/4r (a plan sketch for the Palazzo Thiene), RIBA XVI/9v (plan sketch for a palace in Venice) and RIBA XI/22v (comprising 20 plan sketches for a small palace).<sup>11</sup>

The last document is the most important of the three, due to the quantity of plan sketches made in connection to a single commission. Here Palladio takes a sheet (RIBA XI/22v, *fig. 89*) previously used for a reconstruction of Roman antiquities. The profile of the entablature of the temple of Venus in the Forum of Caesar occupies the right side of this sheet. Palladio then proceeds to sketch small plans for a palace on it, until filling all the spaces available on the right side. After a short period of time, a total of 20 sketches was made. These small and simple plan schemes show Palladio's initial approach to the commission of an urban palace. The architect used to start thinking about a project by producing a set of different alternatives; later, the best ones would be developed with more precision into finished plans. A letter written by Palladio to the building committee of the Duomo of Montagnana provides further support for the argument:

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<sup>10</sup>Concerning Palladio's sketches for villa plans, see Burns, 1975 and 1982; and Lewis, Douglas. *The drawings of Andrea Palladio*. Washington, 1981.

<sup>11</sup>On the sketches for the Palazzo Thiene, see Burns, Howard. "I disegni del Palladio" in *Bollettino C.I.S.A.* vol.XV (1973): pp. 180-182; and Lewis, 1981: pp. 92-93, 112-114. On RIBA XI/22v, see Burns, 1982: pp. 75-77; and Lewis, 1981: pp. 174-175.

*I did not send the drawing any sooner, because alongside all my other tasks which have occupied me I wanted to make different designs (invenzioni) so as to satisfy myself with one which should seem the best.*<sup>12</sup>

Some features of these sketches help to identify them as for an urban palace. Most of the alternatives present half-columns on the whole extent of the facade, and an androne as the main access to the building. Such elements are hardly present in Palladio's villas, but can be found in his palaces (Capra, Valmarana, Barbarano, RIBA XVI/14-A, RIBA XVI/9r-C). Moreover, the building seems to be located on a corner site: sketch no. 12 has a hall with four columns opening to the left side, while on plans no. 5 and 7 the main hall opens to the same side. Most likely, the right side of the plot was occupied by another building or property: in most of the sketches, Palladio places windows and fireplaces on the left side, but only fireplaces appear on the right side. A garden was probably located behind, as many of the alternatives present an andito or loggia/portico on the back.

One of the sketches (no. 19) contains the dimensions of three sides of the palace: 56 piedi (19.80m) on the main facade, 76 piedi (26.90m) on the left side and 67 piedi (23.70m) on the rear facade. Such dimensions cannot be related to any of Palladio's extant palaces or to the ones represented in his treatise. The building is similar in size to a more economic and simplified type of town house developed by Palladio: the suburban palace. Such buildings were usually built on the fringes of urban areas, with their main facade facing a street and a garden behind. Volumetrically, they resemble the cubic central block of a villa, but always having two floors. The internal courtyard found in typical urban palaces is replaced

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<sup>12</sup>Quoted from Burns, 1982: p. 75.

by a loggia facing the garden behind. Examples of this type of urban house are the Palazzo Garzadore (Vicenza, *fig. 121*), the Palazzo della Torre in Piazza Brà (Verona), the Villa Pisani (Montagnana) and the Palazzo Antonini (Udine, *fig. 120*). Only the last two were built. With its compact cubic form, the suburban palace contrasts with three other types of Palladian palaces: the transversally developed one (Palazzo Chiericati, Palazzo Civena, *fig. 95*), the longitudinal one (Palazzo Porto, Palazzo Valmarana, *figs. 116, 117*) and the monumental square palace with a courtyard (Palazzo Thiene, Palazzo Trissino, *fig. 115*). As the site is a fundamental reference for the planning of a palace for Palladio, it is no surprise to realize that each of these categories generally fits a specific kind of location: the suburban palaces are found in urban peripheries; the transversal ones face open spaces; the longitudinal palaces occupy long and narrow plots inserted in densely built urban blocks; and the monumental square palaces tend to comprise an entire block, with four street facades.<sup>13</sup> Suburban and longitudinal plans are most frequently for minor palaces.

The following table compares the dimensions and areas of ground floor plans of some of Palladio's minor palaces (data from the "Quattro Libri" and from RIBA XI/22v):

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<sup>13</sup>The importance of the site in Palladio's projects is stated in the Correr manuscript: *In many of the following buildings I have had to obey not so much the nature of the site as the wishes of the patrons* (quoted from Burns, 1982: p. 75). Concerning the categories of Palladian palaces, see Carbonieri, Nino. "Spazie e planimetrie nel palazzo Palladiano" in *Bollettino CISA* vol. XIV (1972): pp. 165-186.

Palace:	dim. (piedi):	dim. (m):	area (m2):
Civena (Vicenza)	81.3 x 48.5	28.80 x 17.20	490 m2
Pisani (Montagnana)	68 x 64	24.10 x 22.70	545 m2
RIBA XI/22v	61 x 76	21.60 x 26.90	580 m2
Porto (Vicenza)*	78 x 65	27.60 x 23	635 m2
Garzadori (Vicenza)	66.5 x 73.5	23.50 x 26	610 m2
Antonini (Udine)	74 x 77	26.20 x 27.30	760 m2**
Capra (Vicenza)	56 x 146	19.80 x 50.60	1.000 m2

\*dimensions of built part only / \*\*includes kitchen outside

All palaces in the table above have ground floor areas of 1.000 m2 or less, lack a courtyard and present a rear loggia facing an open area. Their plans approach the square format, but in the cases of the palazzi Capra and Civena (*figs. 119, 95*), the site prevents such configuration. The plan studied by Palladio in RIBA XI/22v (*fig. 89*) is an intermediate case, and its dimensions tend to favor a longitudinal rather than a cubic plan. In a certain sense, the site offers conditions which are similar to the original design for the Palazzo Barbarano: a corner plot extended longitudinally with the main facade on the narrow side.

Palladio's plan sketches are simple schemes with the minimal graphic elements to show the basic arrangement of the palace. Walls are generally indicated with a single line. Two short lines (=) crossing a wall indicate a door or a window. Fireplaces are indicated by two short lines linked by a long one ( [ ). Vaults are indicated with crossed lines. Three of the plans (no. 8, 19 and 20; *fig. 89*) present a complete set of dimensions, but generally, the architect sketches freely: he seems to control the dimensional aspects without checking them constantly. The comparison of internal dimensions of rooms and the total

dimensions of the sides of the palace (given in sketch no. 19) shows that Palladio designed his rooms already discounting the thickness of the walls.

Through these rapid sketches, Palladio creates an abstraction which removes the complexities of a real plan and allows him to focus on the creation of a good composition. Problems such as adaptation to the exact dimensions and configuration of the plot, space required for staircases, thickness of walls and exact position of windows and doors are left aside to be defined with more precision in a later moment. In fact, Palladio's villas and palaces reveal that he developed a systematic planning procedure, through which he manipulated a set of basic elements of composition to be assembled in a given commission. These elements include the hall with four columns (generally forming a unit with the sala above, without columns), the classical portico opening to the street or road and the loggia or courtyard behind the main block of the house, the different kinds of staircases (circular, rectangular or elliptical), and finally, seven kinds of rooms with different shapes and proportions (from the circle to the double square), to be located symmetrically on both sides of the hall/sala unit.<sup>14</sup> The invariable nature of a palace program allied to the codification of a vocabulary of compositional elements arranged according to axial symmetry set the guidelines for Palladio's design work. Manipulating this limited number of elements with unparalleled inventiveness in a large number of commissions, he explored the full potential of his system.

Seventeen of the sketches in RIBA XI/22v were drawn in ink; the other three (no. 1, 8 and 12) were drawn in pencil. Such use of different instruments might indicate brief pauses in the process. The examination of the 20 plans reveals that they can be classified in a limited number of particular strategies of composition. The largest group is the central room plan, with no internal columns

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<sup>14</sup>See *I Quattro Libri*, book I, ch. XXI.

or vaults, comprising a total of eight sketches (no. 4, 9, 13, 14, 16, 17, 18 and 20; *fig. 90*). The second largest group contains six sketches for plans with vaulted halls (*fig. 91*), and can be subdivided in three smaller sets: halls with one vault (sketch no. 3 and 11), two vaults (sketch no. 15) and three vaults (sketches no. 6, 8 and 10). The remaining six sketches belong to four different categories (*fig. 92*). Plans no. 1 and 2 might be called “Venetian” as they resemble the plans of Venetian palaces. Sketches no. 5 and 7 present a radical, asymmetric solution, with the hall placed on the left side of the plan. Sketch no. 8 proposes a change in orientation, with the entrance hall opening in the center of the left side of the building. Finally, sketch no. 19 introduces a peculiar arrangement, where a rectangular hall is divided by two rows of columns. Ten of the sketches present a facade with half-columns, which indicates that Palladio was quite sure about its solution. The use of half-columns on the ground floor elevation recalls the built facade of the Palazzo Barbarano.

The eight sketches with a central hall with no columns or vaults are very similar (*fig. 90*). All have two front rooms of about 20 x 20 piedi (7 x 7 m), with an androne in the middle. Next comes the hall, which has a sequence of three rooms on each side. Diversification of arrangement is provided by the main staircase (in rectangular, circular or oval shape and located on the back or on the left side), the service staircases (spiral or rectangular and also in varying positions), and the rear end of the hall (which presents an andito, a loggia or the main staircase). Some of the sketches are remarkably similar, such as no. 13 and 14, and also no. 16 and 18. Palladio probably felt some potential in this arrangement, and therefore insisted trying as many variations as possible.

The hall is spacious (24 x 36 piedi or 8.50 x 12.70 m), and the fact that it has no columns enhances such perception. According to Palladio’s usual procedure

in this kind of building, the sala would be located above, in correspondence to the hall below. Here the first problem of these plans comes up: how Palladio will provide natural light, ventilation and a convenient view to an interiorized hall and to the sala above it? In the projects for the Antonini, Garzadore and Pisani palaces, the unit hall/sala was located opening to the street, avoiding all these problems (*figs. 120, 121*). However, in other occasions (for instance, long and narrow plots), Palladio developed a different strategy, locating small courtyards (“corti”) or light wells on the sides of the hall/sala. Examples of such solution are the Palazzo Capra (*fig. 119*) and the plans on RIBA XVI/8 (project for Palazzo Thiene Bonin Longare), XVI/9, XVI/14 A (alternative for Palazzo Barbarano, *fig. 98*) and XVI/19 A. Palladio must have thought about having these “corti” around the hall here, in order to prevent the isolation of the hall/sala. They would be specially needed in alternatives where openings to the garden behind the hall were prevented by the staircase. In fact, the small longitudinal rooms with openings to the hall in sketches no. 13, 16, 17, 18 and 20 seem to be small courtyards. These small open areas provide natural light and ventilation, but cannot offer a good view. The problem was not so serious in the hall below, which was basically a space of reception and distribution. Above, the sala could be visually connected to the rear garden through a loggia, as in sketches no. 13, 14 or 20. As the other five sketches of this group do not offer such possibility, one could consider these three proposals as the most effective arrangements of the set.

Perhaps the most interesting group of sketches is the sequence of six plans with cross-vaulted halls (*fig. 91*). It comprises sketches no. 3, 6, 8, 10, 11 and 15. In terms of internal subdivisions, the arrangement is similar to the first group. The basic difference is that the hall has from one to three vaults supported by columns.



In sketch no. 3, Palladio places his “hall with four columns”<sup>15</sup> right in the center of the plan, where the longitudinal and transversal axes (corresponding to the andito and the staircase) cross each other. On the four sides of the hall Palladio locate small rooms which probably contain service staircases. The beauty of the centralized scheme must have appealed to the architect of the Villa Rotonda. However, such kind of strategy is never easily adaptable to urban locations: as in the first group of plans, the central hall here would need a small courtyard, probably to be located in the middle room on the right side. Plan no. 11 is very similar to no. 3, except for an oval staircase placed between the two rear rooms and the removal of the four small corner rooms. As a consequence, the front and rear rooms can be enlarged. The presence of two large staircases is typical of the nature of these sketches: one was drawn and seemed unsatisfactory, and then Palladio tried the second one. If the oval staircase is chosen, then the hall loses the direct link with the garden through the andito.

With plan no. 15, Palladio tries something different by duplicating the vault. In order to avoid an excessive extension of the hall, he places two independent columns in the middle and two half columns on each of the extreme walls. With such move, Palladio creates a hall similar in extent to the one in sketch no. 3, but with a totally different spatial effect. Light, ventilation and view are much better here, as the hall is connected to the garden through a rear loggia. The improvement is even more significant above, where the garden can be viewed from the “sala.”

Sketches no. 6, 8 and 10 amplify the longitudinal effect of the cross-vaulted space: Palladio now tries a scheme with three vaults on columns. Again he reduces excessive extension using half-columns on both extremes of the hall. Additional

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<sup>15</sup>See *I Quattro Libri*, book 2, pp. 36, 37.

space is gained through the elimination of two corner rooms in plans no. 6 and 10 and the suppression of all four in no. 8. In plans no. 6 and 10, the little space remaining on the back of the hall is used to locate the staircase, and two small courtyards are placed on the sides (clearly seen in sketch no. 10). Two main staircases appear in sketch no. 6, including the circular one, which is the only staircase in all 20 plans to be placed on the right side of the building. Most likely, as soon as Palladio sketched it there, he realized the impossibility of having windows in such position and so placed a second staircase on the back of the hall. Plan no. 8 presents the same centralizing strategy of no. 3 and 11: this pencil sketch follows a scheme of biaxial symmetry, made explicit through the complete set of measurements provided.

The plans with cross-vaulted halls are probably the most appealing of the whole sheet. The simple convention of crossed lines ending on columns brings to mind many of Palladio's impressive ground floor halls of such kind which were built, such as in Palazzo Thiene, Palazzo Porto, Palazzo Pisani (Montagnana) and Palazzo Barbarano (see *fig. 112*). In fact, the "hall with four columns" is one of the most important elements of design in Palladio's compendium of solutions (*fig. 111*). The formula, whose repetition could result in monotony and rapid exhaustion in the hands of a less creative architect, is manipulated by Palladio with remarkable inventiveness. The basic scheme (a square hall with four columns close to the corners) is presented in many different versions: supporting a flat ceiling with four beams resting on the columns (palazzi Garzadori, Antonini and della Torre, Villa Cornaro); with one cross-vault on four columns (palazzi Porto, Capra, RIBA XVI/14 B); with two, three or more vaults in a longitudinal disposition (palazzi Barbarano and Trissino, RIBA XVI/14 A and C, RIBA XVI/10); and with three vaults in a transversal disposition (Palazzo Thiene, RIBA XVI/8r and

XVI/10). Palladio developed additional variations for vaulted halls in his villas, where one finds cruciform and “T” shaped halls covered by cross-vaults (villas Pisani a Bagnolo, Barbaro, Foscari). Therefore, Palladio demonstrates that developing a system of previously defined solutions helps to save the energy spent in creating “ex novo” in each new commission and fosters creativity in the formal definition and arrangement of each element.

The six remaining sketches represent strategies which were less explored by Palladio (*fig. 92*). Plans no. 1 and 2 may be called “Venetian,” due to their similarity with the basic arrangement of a traditional Venetian palace (a long central hall running almost the whole length of the palace with a sequence of smaller rooms on each side). These two plans are the only ones without an androne as the entrance to the palace. Plans no. 5 and 7 present an unusual scheme with an asymmetrical position of the hall (all other sketches follow Palladio’s usual attachment to strict symmetry). The reason for such move is evident, if one thinks about the problems of isolating the hall/sala unit in the middle of the building (already considered above). In these two alternatives, the hall and the sala would face the street on the left side, getting a good view and plenty of natural light and ventilation. To Palladio, however, the asymmetrical plan probably seemed too much of a deviation from the rules of classical composition that he limited the investigation to only two sketches. Plan no. 12 is also unique, being the only alternative proposing a change in the orientation of the building. Here Palladio places the hall opening to the street on the left side. Centralization is again stressed with a scheme of biaxial symmetry. The “T” hall with four columns (but no vault) is sided here by two staircases. Finally, plan no. 19 represents a variation of the largest group (central hall with no columns or vaults) by introducing two rows of columns in the middle of the hall. As no vault is indicated, Palladio probably

thought about having a flat ceiling here, with the columns supporting wooden beams. The sketch alone cannot express the totally different spatial effect offered by this alternative, but Palladio was certainly conscious of it.

### **Palladio's plan alternatives for small palaces**

The sheet with twenty plan sketches (RIBA XI/22v, *fig. 89*) shows Palladio initial approach to a palace commission. He already knows the program of the building and the position and dimensions of the plot. Therefore, he goes to the sheet of paper and generates many “*invenzioni*” until exhausting the plan sketch stage. Based on the sheet previously analyzed (RIBA XI/22v) and on Palladio's letter to the building committee of the Duomo of Montagnana, it is possible to conclude that this procedure was generally employed by him to define the plan of a building. After this “brainstorm” stage, Palladio's next step was the selection of a limited number of alternatives for further development. Some of his plan alternatives remain, such as RIBA XVI/9r (three alternatives for a palace; *fig. 96*), RIBA XVI/11, XVI/17, XVII/14 (four alternatives for the Palazzo Civena; *figs. 93-95*), RIBA XVI/8C, XVII/9v (two plans for the Palazzo Porto) and RIBA XVI/14A, B and C (three alternatives for the Palazzo Barbarano; *fig. 97*). Except for the case of Palazzo Porto, which is a design for a large urban house, the other three illustrate Palladio's second stage of design for minor palaces.

Alternative plans are finished drawings probably prepared to be shown to the client in discussions about the final project. Most likely, sketches were not shown to most clients, because they were too abstract to be understood, and also because in reserving the first phase of planning for himself, the architect would be able to offer options to the patron based on his own selection, limiting the client's direct interference. Moreover, architects' plan sketches could become an

encouragement to some clients to try their own sketches (the effect would be the opposite with finished drawings). The preparation of more elaborate drawings might also coincide with an initial payment to the architect for his work, and in this case alternatives would attest the labor done. However, one should not forget that the principal role of these drawings was to convince the patron to build.

The existence of alternative plans for a given palace does not necessarily mean that they were all prepared at the same time. Among the drawings mentioned above, the plans for the Palazzo Civena show that the design work was not restricted to the sketch stage. In this project, finished plans made at different moments manifest the evolution of the design from one proposal to another. The Palazzo Civena was built from 1540 to 1542 in Vicenza.<sup>16</sup> RIBA XVI/17 was the first finished plan prepared for the building (*fig. 93*). Sometime later, Palladio prepared two new plan alternatives for the palace (RIBA XVI/11, *fig. 94*), in which some changes were introduced: the street loggia was changed from seven arches on narrow piers to five arches on thicker piers, the two wings projecting backwards were shortened and the hall became a more elaborate space, with a cross-vault, pilasters, columns and niches. The common features of the two halls shown on this sheet are the square space covered by the cross-vault followed by a loggia with two rows of columns leading to the open area at back. The differences are the transversal expansion of the hall in the upper drawing and the projection of the staircases backwards on the lower plan, opening space for two additional rooms and two service stairways. The final plan (RIBA XVII/14, *fig. 95*) presents the most developed solution for the hall: the lower plan on the previous sheet now receives a

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<sup>16</sup>Puppi, Lionello. *Andrea Palladio: the complete works*. Milan, 1986: pp. 87-89; Lewis, 1981: pp. 25-28; Zorzi, Giangiorgio. *Le opere pubbliche e i palazzi privati di Andrea Palladio*. Venice, 1965: pp. 183-187.

large basilical room which separates the square hall from the rear loggia. Palladio shows here his acquaintance with Ancient Roman architecture (mostly his taste for the plans of the baths) even before his first trip to Rome (1541). When the four proposals are seen together, it becomes clear that the differences are almost completely related to the composition of the hall and the staircase. These are the parts of the plan where Palladio concentrated most of his creative powers.

On the sheet RIBA XVI/9r, Palladio draws four plan alternatives for a palace (*fig. 96*). Burns suggests that these plans might be for a site in Venice, as the palace has many small windows on the main facade.<sup>17</sup> Three of the drawings are finished ground floor plans, while one is a smaller plan sketch (Palladio never use columns in the sala above, but only in the ground floor hall). The small projection of the right side room on the back manifests an irregularity typical of urban sites in this regular (and probably abstracted) plot. Both sides are occupied by other buildings or properties, and so only fireplaces are drawn on the side walls. The diversity of the arrangements makes this set of plans a very interesting one. The first plan incorporates a basic feature of the Venetian palace plan: a long central hall connecting main entrance and courtyard. On the sides, Palladio locates two rows of rooms. The three longitudinal subdivisions have equal dimensions: 14.5 piedi (5.10m) wide and 40 piedi (14.20m) long. The hall ends in a central courtyard, where one finds another of Palladio's graphic conventions: dotted lines probably indicating a continuous balcony around the open space and serving as external communication in the palace. In fact, the long hall runs the whole extension of the palace, being interrupted by the central courtyard, where both openings are marked by two columns. On both sides of the courtyard, Palladio places the staircases, which conveniently open to the courtyard and also to the rooms. The

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<sup>17</sup>Burns, 1975: pp. 52, 53.

rear part of the palace repeats the same tripartite arrangement of the front part, but has a shorter length.

The second plan replaces the traditional Venetian long hall with Palladio's hall with four columns. The main staircases are now located besides the hall, allowing immediate access to the sala above after entering the house. The use of the hall/sala unit changes the whole scheme: Palladio now creates a narrow and elongated open area in the center of the palace to provide light and ventilation for the rooms behind the hall. On the previous plan, the courtyard separated the two main areas of the palace (family in front, guests and services probably in the back). On the second plan, such separation is probably performed by the longitudinal open space, as transversal communication becomes more difficult. Privacy is improved with the concentration of ceremonial functions in the hall/sala unit, and the family quarters are probably placed on the right side and services/additional rooms on the left. Two service stairways are provided on the back, as the main staircases are now too far from this area of the palace.

The third plan alternative is very similar to the cross-vaulted proposals seen in the set of sketches on RIBA XI/22v (*fig. 89*). After proposing entrances with a long Venetian hall or a hall with four columns, Palladio presents an entrance block with an "androne" sided by two large rooms. He now places his traditional columnar hall in the center, with small courtyards on both sides. The androne is shortly extended after the hall, leading to an oval staircase connecting to the sala above. Here Palladio manifests again his preference for centralized compositions: the hall and all spaces connected to it (service stairs, small patios, corner rooms) are organized in a scheme of biaxial symmetry (see RIBA XVI/14 A and Palazzo Capra; *figs. 98, 119*). The beauty of the arrangement as a composition needs to be weighted against the disadvantage of having the hall/sala in the middle: the views

from the sala are certainly much less appealing compared to the other two proposals. This is probably the reason why very few centralized halls are found in Palladio's built urban residences and among the palaces published in the "Quattro Libri." They are better suited for villas (Rotonda, Cornaro, Valmarana a Lisiera, Thiene a Cicogna; *fig. 104*) where the central hall opens to the outside through the porticoes. In certain villa/palaces, centralized halls work better (as in the Palazzo Garzadori; *fig. 121*), the same applying to minor palaces for corner sites (see the example of the Palazzo Capra; *fig. 119*).

The fourth drawing on this sheet is a sketch in which Palladio studies minor changes in the third proposal: the oval staircase is advanced toward the hall, two small stairways are suppressed and the androne is slightly enlarged. This is probably a less impressive arrangement of the plan, but saves some space and is less expensive. The small plan shows that Palladio sometimes return to sketches after preparing finished plans, to test further developments.

The last set of plan alternatives by Palladio to be considered here is related to the commission of the Palazzo Barbarano, built in Vicenza between 1570 and 1575.<sup>18</sup> The plot for this building is located in a corner (Contrà Porti and Contrà Riale) in the central area of the city. As it stands today, the building is a large palace, but when Montano Barbarano first asked Palladio to design it, he was thinking in a smaller residence. The inverted "L" shaped plot was about 100 piedi (35.40m) long and 68 piedi (24.10m) wide, for a total area of about 740 square meters. Compared to the original ground floor area of the palazzi Thiene (about 3.300m<sup>2</sup>), Porto (about 1.700m<sup>2</sup>) and Valmarana (about 2.600m<sup>2</sup>), the initial

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<sup>18</sup>Burns, 1975: pp. 219, 220; Lewis, 1981: pp. 167, 168; Puppi, 1986: pp. 234-236; Zorzi, 1965: pp. 253-260.



plans for Barbarano's house can be classified as for a minor palace.<sup>19</sup> The sheets RIBA XVI/14 A, B and C present three alternative plans for this palace (*fig. 97-100*). These plans were probably preceded by sketch studies similar to the ones in RIBA XI/22v, from which Palladio selected what seemed the best options to be developed into three finished drawings.

The first of these plans ("A") is a centralized scheme developed around an impressive central hall with three cross-vaults supported by eight independent columns (*fig. 98*). The sources for this solution have been traced to the vaulted hall of the Theater of Marcellus in Rome, drawn by Palladio (RIBA XIV/3v), but it might also be inspired in the main hall of the Basilica of Maxentius ("Quattro Libri," book IV, 12, 13). Each central column is reflected by one half-column on the walls, and the four corner columns are reflected by two half-columns and a corner pier sided by two niches. Most likely, entablatures would link each column to the respective half-column on the wall. Therefore, the spatial effect of the multi-vaulted hall would be enhanced by its full classical articulation. As usual in these interiorized halls, light and ventilation have to be provided from small courtyards on the sides; here Palladio opened three windows to an open space on the left side.<sup>20</sup>

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<sup>19</sup>Dimensions of Palazzo Barbarano based on RIBA XVI/14 B; dimensions of other palaces based on Bertotti Scamozzi, Ottavio. *Le fabbriche e I disegni di Andrea Palladio*. Vicenza, 1796.

<sup>20</sup>Despite the fact that all three proposals present windows opening to this open space, the dimensions and limits of this area are not provided in any of the drawings. Maybe Montano Barbarano was already negotiating the eventual purchase of additional land on that side of his plot. In fact, in 1570 Barbarano added a large area on the right side of his plot, which made possible the great enlargement of the palace with a more extended entrance block and a second rear wing.

The centralized scheme is adapted to the irregular plot the best way possible: the staircase opens to the central vault, defining a transversal axis with the second window on the opposite side. On the two extremes of the hall, Palladio locates an androne sided by two small rooms (three of them contain service stairs). Practical reasons prevent that rooms and entrance corridors are exactly equal on both sides. The front block of the palace is wider than the rear part, and presents a symmetrical arrangement of rooms on both sides of the androne. Such rooms might have a more public function and also serve as summer quarters for the family and guests. The rear rooms define the service area of the palace, with large stables for 13 horses. Other rooms, such as kitchen, pantries, cellar and storage areas would also be located in this sector (in the basement and first mezzanines).<sup>21</sup> The connection with the street on the back defines the service access, showing the independent operation of the two main sectors of the palace. Concerning the piano nobile, the sala would be located over the hall; it would be a large reception hall, measuring 50 x 25 piedi (17.70 x 8.85m). The dimensions would be the only common feature of these large superposed rooms, as the sala above would have no columns or vaults, being covered with a flat ceiling. This is Palladio's usual procedure, resulting in the creation of rooms of equal size and shape, but with a totally different spatial effect. Family quarters would be located in the front block, facing Contrà Porti. There, on the narrow side of the plot, Palladio articulates the whole extent of the elevation with six giant half-columns.

As seen in one of the plans previously analyzed (RIBA XVI/9r, third plan; *fig. 96*), the great disadvantage of a central hall/sala is its isolation from the street or garden facades. In some cases, Palladio solved the problem by extending the hall up to the facade (as in the Palazzo Capra; *fig. 119*) or by opening a loggia between

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<sup>21</sup>See "Quattro Libri," book II, 3.

the hall and the facade perimeter (as in the Palazzo Garzadori; *fig. 121*). But the loss was not small when the sala had to open to a small “cortiletto” unveiling from above the usually inelegant view of the interior of an urban block. Moreover, there would be no public display of the eventful gatherings through the windows of the piano nobile opening to the street, which would not be a despicable thing for the average patron. On the other hand, the advantage of the central hall arrangement was the provision of a large “covered courtyard” in two levels, facilitating the circulation in the palace.

It is interesting to notice how this plan has a similar disposition to some of the plans seen in the sheet with initial sketches (RIBA XI/22v; *fig. 89*), particularly no. 6, 8 and 10. All four proposals are located on corner sites which are narrow and deep, having halls with three vaults, access through an androne sided by two identical rooms and six half-columns organizing the main facade.

The fact is that such central halls were never built except in villas, where their proximity to the facade perimeter made their use possible and convenient. In urban plots, the solution of this problem was much more difficult. The Palazzo Capra provides a solution, but it is valid only for long corner sites, where the hall/sala in the center can have openings to the street on the side (*fig. 119*). Why Palladio reintroduces this scheme so many times? Traditional Venetian palaces used to have the long “portego/sala” as the central space of the palace which presided the organization of the whole. Palladio, inspired by his studies of ancient and contemporary Roman architecture, developed a taste for central/symmetrical arrangements, of which the Villa Rotonda is the perfect example (*fig. 104*). Therefore, he probably approached these commissions trying to arrange their plan as symmetrically as possible (with the unit hall/sala in the center of the

composition). Despite the difficulties of such approach in urban commissions, the result could serve at least as inspiration for a more practical solution.

Plan “B” introduces radical changes: except for the perimeter walls and the staircase, everything inside the palace is transformed (*fig. 99*). Palladio brings the hall to a new position in the front part of the house. Moreover, this plan has a new square hall with four columns supporting a beamed flat ceiling. Therefore, geometrical outline and spatial effect are very different compared to the previous hall. The sala above now opens to the street; it measures 28 x 28 piedi (9.90 x 9.90m), being about half the size of the same space in the previous plan (50 x 25 piedi or 17.70 x 8.85m).<sup>22</sup> The unit hall/sala is distinguished on the main facade by the placing of four half-columns in the center, while the sides have no orders. Palladio employs here the same strategy used in the facades of the palazzi Antonini and Pisani (Montagnana). The front block of the building has two large rooms besides the hall, one medium-size and three small rooms on both sides of the andito (Palladio did not indicate any service stairways). Above, family quarters would be located around the sala. The rear section of the palace presents a longitudinal courtyard with loggias at both extremes. Such open space certainly improves the functioning of the service area in the back, as the unifying central hall is replaced with the more autonomous spaces of the front hall and the rear courtyard.

The same intercolumniation is kept on the main facade, in the hall and in the two loggias in the courtyard (two narrow side bays and a larger central one). Except for the hall, the disposition of the plan is of a “Sangallesque” character: the

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<sup>22</sup>As no plan of the piano nobile is available, one could think of the sala as comprising the whole area from the facade to the rear loggia, and so being bigger than the hall below. However, in other minor palaces (Pisani, Antonini) and villas (Cornaro), Palladio never subtract the small rooms on the piano nobile to make the sala larger.

longitudinal axis commands the composition, being crossed by a transversal axis in the courtyard loggia, which then leads to the main staircase. In this case, the visitor entering the palace would have an interesting sequence of spaces to experience: first the large columnar hall, followed by the narrow andito, then the open space of the courtyard with the loggias, followed by the staircase, and finally, the arrival at the sala above.

With plan “C” Palladio creates the alternative which would be selected for execution and included in the “Quattro Libri” (book II, 22, *figs. 100, 101*). The entrance hall is maintained in front (as in plan “B”), but now Palladio tries to recover some of the size and spatial effect of the great hall of plan “A.” Therefore, the hall is extended backwards and covered by three cross-vaults supported by four columns and four half-columns. Its new dimensions are 25 x 40 piedi (8.90 x 14.20m). The following table presents a parallel of the three halls:

Pal. Barbarano (hall)	dim. (piedi)	dim. (m)	area
<b>RIBA XVI/14 A</b>	50 x 25	17.70 x 8.90	158 m2
<b>RIBA XVI/14 B</b>	28 x 28	9.90 x 9.90	98 m2
<b>RIBA XVI/14 C</b>	40 x 25	14.20 x 8.90	126 m2

In plan “C” Palladio combine the advantages of the two previous plans in terms of the design of the hall/sala unit. If the idea of the huge centralized hall is too idealistic and the more humble solution of plan “B” seems not good enough for Barbarano’s longitudinal plot, a compromise is found in plan “C.” The palace gets an impressive vaulted entrance and the sala above is large and well positioned. With the extension of the hall, the rear part of the palace is compressed: the courtyard lost the second loggia on the service access and the stables lost two stalls.

Therefore, this plan corresponds almost exactly to the plan published in the “Quattro Libri” as the final version for the palace. The major difference is that in this series of plans, Palladio maintains the original profile of the plot, while in the treatise it was regularized.

The main facade is articulated by eight half-columns. This also agrees with the facade published in the “Quattro Libri,” which has eight giant half-columns (*fig. 101*). On the sheets of the treatise, the solution recalls the facade of the Palazzo Valmarana, but in the building the tridimensional effect of the tall half-columns would be different, comparable to the Palazzo Porto-Breganze and the loggia del Capitaniato (except for the open arcade on ground level). It is interesting to notice that the last half-column on the left side of the facade does not coincide with the wall inside. In the treatise, Palladio evidently made the columns fit the extent of the palace facade, as he also did by regularizing the corner angle: such “imperfections” would reduce the didactic impact of his plates. However, in this drawing ( RIBA XVI/14-C; *fig. 100*), the loose position of the last column considered together with the presence of some openings and extending walls into the plot on the left side might reveal that the enlargement of the area was already being contemplated when the alternative plans were prepared.

When considered together (*fig. 97*), these three plans reveal the elements taken by Palladio to achieve variety. Here he proposes three different solutions for the main facade (with four, six and eight half-columns), three different kinds of staircases (one rectangular, two oval), three solutions for the courtyard area (none, with one loggia and with two loggias) and three different entrance halls. This last element is evidently the most important component in Palladio’s scheme of palace planning. After the hall/sala unit is defined, the rest follows naturally: family quarters are distributed around the hall/sala, while service areas are located in the

back of the palace. Palladio's adoption of strict symmetry makes the arrangement very simple, sizes varying according to his three categories of rooms.<sup>23</sup>

The fundamental importance of the reception hall in Palladio's palace plans is shown when the three alternatives for the Palazzo Barbarano are compared to the three plan proposals in RIBA XVI/9r (previously seen; *fig. 96*). In both sets Palladio presents one plan with a central hall, one with a frontal hall and one with an elongated hall. Such similarity does not imply that Palladio is repeating a routine: when one examines carefully the plans considering the spatial configuration, each solution shows its own identity. The method of composition and its elements are similar, but what is crucial is Palladio's ability to achieve originality by the simple and sensible manipulation of his architectural system according to the circumstances of the site.

Many of Palladio's palace commissions failed to be completed or even started because the total project was too large and costly even for wealthy clients. Examples of such commissions are the palazzi Thiene, Porto, Valmarana and Porto-Breganze. In these projects, Palladio started with an ambitious plan and ended having a fragment built. The case was different with Montano Barbarano: since the beginning, his palace was to be a smaller one, despite being endowed with a facade and interiors able to parallel the bigger Vicentine palaces of the 16th century. With the palazzi Thiene, Porto and Chiericati long left incomplete, Palladio might have thought that Barbarano's commission of a smaller palace was a real chance to have an important town residence completed in Vicenza. Unfortunately, he was not successful again: Barbarano was not satisfied with the original plan and consumed his wealth to enlarge it, after Palladio's initial scheme

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<sup>23</sup>Palladio. *I Quattro Libri*, book II, p. 4.

had already been started.<sup>24</sup> Therefore, a mixed result became inevitable, and the architect was deprived of another opportunity to see his palace planning strategies fully realized (*fig. 102*). In spite of that, the survival of three plan alternatives and the publication of the Barbarano project in the “Quattro Libri” allows one to appreciate the full potential of Palladio’s planning procedure in this commission.

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<sup>24</sup>Palladio himself is responsible for the enlargement plan, according to his words in the “Quattro Libri”(see Palladio, 1570, book II: p. 22).





## **PART 2 - THE METHODS**

**Antonio da Sangallo the Younger**

**Baldassare Peruzzi**

**Andrea Palladio**

## CHAPTER 5 - Antonio da Sangallo the Younger

The origins of a more systematic approach to the design of a private palace can be traced back to the Palazzo Medici in Florence, where Michelozzo designed a rectangular plan with a square courtyard in the center, enclosed by a peristyle (*fig. 1*). The main axis of this palace is defined by the main entrance, the central bays of the front and rear loggia and the access to the garden. The main axis is crossed by a transversal one defining the front loggia and linking the entrance to the main staircase leading to the piano nobile. Bramante brought the process a step further with the plan of the Palazzo Castellesi in Rome (c. 1500; *fig. 3*), which presents a symmetric and axially organized plan arranged around a porticoed courtyard.<sup>1</sup> Being smaller than the great cardinal residences in Rome, the Palazzo Castellesi probably suggested the application of the compositional strategies of larger palaces in minor commissions. A former assistant of Bramante at St. Peter's, Antonio da Sangallo the Younger defined such transposition with the Palazzo Baldassini (1514-16; *fig. 9, 31, 33-36*), whose plan became very influential in Rome for the whole 16th century.<sup>2</sup>

Antonio's client here was Melchiorre Baldassini, a consistorial lawyer in the Papal administration of justice in Rome.<sup>3</sup> The plot he owned was relatively small (c. 900 m<sup>2</sup>) and located in the via delle Coppelle (the former via Recta), in the

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<sup>1</sup>Bruschi, Arnaldo. "Edifici privati di Bramante a Roma: Palazzo Castellesi e Palazzo Caprini" in *Palladio* n. 4 (1989): pp. 5-44.

<sup>2</sup>Bruschi, 1986: p. 14.

<sup>3</sup>On the Palazzo Baldassini, see Cogotti, M. and Gigli, L. *Palazzo Baldassini*. Rome, 1995; Frommel, 1973: pp. 23-29; Giovannoni, 1959: pp. 272-276; Redig de Campos, D. "Notizia su Palazzo Baldassini" in *Bollettino del Centro di Studi per la Storia dell'architettura*, n. 10 (1956): pp. 3-22.

middle of a block with private property on both sides and a secondary street on the back. Antonio followed the 15th century tradition of private palace planning in placing the owner's quarters and reception areas facing the via delle Coppelle. Visitors enter the palace through an androne which leads to the courtyard loggia (*fig. 31*). On the right side of the androne is a large hall, probably for public audiences and official events connected to the owner's profession. On the left side of the androne, the disposition corresponds to Baldassini's "appartamento" on the floor above, and may indicate the quarters for guests and eventual retreat of the owner in the hottest days of the Roman summer. A square courtyard was placed in the middle of the palace, but the limited area restricted the use of a portico to only one side. The sides of the courtyard were occupied by a set of three rooms on the left and the staircase and its light well on the right. Originally smaller than it is today, the rear wing contained service areas and a decorated hall on ground level (E), connected to a small garden (F; see original drawings in *figs. 35, 36*). The piano nobile presented the main reception hall (A), followed by Baldassini's main bedroom (B), a smaller room (C, probably a studio) and a bathroom (D). The set of rooms on the left side of the courtyard was probably occupied by Baldassini's wife and also for occasional guests, as the couple didn't have any children.

In terms of the elements of the plan, Sangallo relies on the example of Bramante's Palazzo Castellesi. The difference is the size and number of the elements: while Baldassini's "appartamento" has only three rooms after the "sala," cardinal Castellesi has eight rooms in his private quarters. The "sala" or main hall of the Palazzo Castellesi measures 21.60 x 10.50 m (230 m<sup>2</sup>), while the same space in the Palazzo Baldassini has dimensions of 14 x 7.50 m (105 m<sup>2</sup>). Both palaces present a square courtyard in the middle, but while in the Palazzo Castellesi it measures 15.51 x 15.51 m and has porticoes on the four sides, in the

Palazzo Baldassini the courtyard measures 10 x 10 m having only one side with a loggia. But here one perceives that in adapting the arrangement of a large palace to a smaller one, Sangallo is in fact creating a new solution. In order to reduce the perception of a simplified scheme for the courtyard, Antonio replicates the arrangement of the loggia as a relief motif on the other three sides. The staircase also presents a similar design, orientation and position in both palaces. However, the Palazzo Castellesi is a freestanding building, where the staircase can be lit and ventilated through openings onto the street on the right side. In order to have the same kind of staircase in the Palazzo Baldassini, Sangallo had to provide a light well. He also uses this kind of artifice in dealing with other constrained plots, as shown in a plan in U 1235 (*fig. 64*; notice the “aria”) and in the plan sketches for the Palazzo Sangallo in Via Giulia (*figs. 42, 45*).

In adapting Bramante’s example to a minor palace, part of Sangallo’s work was the result of a process of adaptation and simplification, as was already mentioned (number and size of rooms and loggias, dimensions of the courtyard). Other solutions better express the originality of his contribution. One of them is the duplication of the ground floor loggia on the piano nobile above, where it serves as an open “vestibule” before the access to the “sala” and the owner’s apartment.<sup>4</sup> Another innovation is the already mentioned extension of the classical articulation of the double loggia to the other three walls of the courtyard. Finally, Sangallo gave to the androne the character of an entrance atrium (see “Atrium”

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<sup>4</sup>Usually, the access from the staircase to the “sala” on the piano nobile was made through a corridor with windows opening to the courtyard (Pal. Medici, Pal. Castellesi). An open loggia was employed in the palazzi Venezia (started after 1465) and Cancelleria (started 1485), both in Rome. The early maturity of the classical articulation of the first makes it a probable precedent for the courtyard loggia of the Palazzo Baldassini.

below). Such innovations are fundamental aspects in the promotion of the house of the Roman lesser nobility to the rank of “palazzo.”

### **Principles of composition**

The principles of composition are also remarkably similar in the Palazzo Castellesi and Palazzo Baldassini. Sangallo’s plan follows a biaxial scheme, where the longitudinal axis organizes the central spine of the building, comprising the sequence of androne/atrium, loggia, courtyard, andito through rear wing and garden. The transversal axis comprises the loggia and the access to the staircase leading to the owner’s “appartamento” (with the sala and family quarters; *fig. 52*). However, Sangallo’s systematization of a minor palace plan is not only based on abstract formulas such as axuality and symmetry. There is a strong link between the two compositional axes and the ceremonial circulation inside the palace. The longitudinal axis connects front and back of the Palazzo Baldassini, going from androne through loggia, courtyard and andito to finish in the rear garden. The transversal axis is related to vertical circulation through the main staircase, which starts with a small flight aligned to the loggia and then turns 90 degrees to the right after the first landing. Therefore, both axes take in consideration the visual experience of the visitor walking through the palace to go up to the sala and the family reception areas or to go through the courtyard toward the rear block and garden area.

Sangallo applies the same compositional strategy introduced in the Palazzo Baldassini in most of his palace commissions. Examples of projects for large palaces which follow such planning scheme are the Farnese (Rome, 1514-15; *fig. 53*), Cantelli (Parma, 1526; U 292, 1303; *fig. 54*) and Pucci (Orvieto, 1528-34; U 968, 969; *figs. 29, 30*). The cases of minor palaces are much greater: Baldassini (Rome,

1514-16; U 1298, *fig. 31*), Vescovo di Cervia (Rome, U 709, after 1516; *fig. 51*), Turini (Rome, 1518-26; U 997, *fig. 56*), Orsini (Rome, 1518-26; U 1004, *fig. 57*), Farratini (Amelia, 1520-25; U 1280, *fig. 62*), Le Roy (Rome, 1522-23; *fig. 32*), Parisani (Tolentino, 1530), Giovan Francesco Rosati (Fermo, 1532; U 1047 B; *fig. 58, 60*), Casa Sangallo (Rome, 1534-36; U 1092, 1224, *figs. 26-28*) and Tiberio Crespo (Orvieto, after 1540; U 960; *fig. 61*). Sometimes, even the more humble “casa” is planned with this same strategy, as in the case of some houses Sangallo designed for Castro (1538-40; U 747, *fig. 63*).

In all these palaces, the arrangement of the plan follows the same organizational scheme mentioned above. Evidently, Sangallo’s scheme has to be adjusted to the specific circumstances of each site and eventually to specific requests from the patron. The width and length of a given plot would determine the size and geometry of a courtyard and the possibility of a rear block and garden. Two palaces designed by Sangallo for the urban renovation of Piazza Nicosia in Rome show his planning scheme adapted to different plots (see *figs. 56, 57*). A deep plot would favor a second courtyard, while plots with limited extension would favor a “villa-palace” plan, with an open courtyard and no rear block (see villa-palaces below). A corner plot would induce the location of the main areas of the palace along the two streets rather than in front and rear blocks (as in the Palazzo Sangallo; *fig. 42*). Despite all these variations, the planning scheme can be perceived in all examples quoted above. The next step is to consider the design of some individual parts of Sangallo’s minor palace plans.

### **The atrium**

With few exceptions, Sangallo’s private palace facades are very sober in decoration, and the Palazzo Baldassini endorses the principle. However, a classical

portal gives a hint of what happens inside the palace. Sangallo's androne is not a mere entrance corridor with a vault: here the architect anticipates one of his favorite themes, the reconstruction of the Vitruvian atrium, best illustrated in the sheet U 1265 (see *fig. 59*). Whenever possible, Antonio designs atriums with two rows of columns separating a central vaulted space from two flat-ceiling aisles. Such kind of atrium is found in the Palazzo Farnese and the projects for the Palazzo Pucci in Orvieto and Palazzo Medici in Rome (U 1259v; *figs. 53, 29, 30*). Sometimes Sangallo proposes this kind of atrium for minor palaces, as in the houses for Girolamo and Giovan Francesco Rosati in Fermo (*fig. 60*) and one of the palaces in U 1235 (*fig. 64*). But more commonly, owners of small plots could not afford the cost and the waste of area required for this elegant space. For this cases, Sangallo transformed a conventional androne in an atrium by the application of a row of pilasters with an entablature to the walls. Sometimes, recessed panels and niches are located between the pilasters, emphasizing the distinctive character of the area. The solution is employed in the Palazzo Baldassini and Palazzo Le Roy, both in Rome. Occasionally, large palaces can have such atriums, like the Palazzo Cantelli in Parma (*fig. 54*). However, the point here is that Sangallo provides a distinct entrance for minor palaces which resembles the architecture of his larger palaces, despite its smaller cost and size. The Palazzo Le Roy illustrates the highest level of sophistication: in the courtyard loggia, Antonio applies the motif of the perspectival door frames used in the atrium of the Palazzo Farnese to the doors on both sides of the androne.

### **The atrium and the position of the “sala”**

The definition of the atrium was not only a matter of cost and availability of space, but also an important design issue. Some projects manifest very clearly the



implications of a design decision concerning the atrium. When planning his house on the via Giulia, Sangallo tested a solution with *androne* (U 1315; *fig. 26*), then altered the scheme in two new plans with atriums (U 1092, 1224; *figs. 27, 28*) to return to the *androne* in the built palace (*fig. 39*). On the sheet U 960 there are two plans attributed to the Palazzo Crispo in Orvieto (*fig. 61*). One of them shows the palace as it was later built: an *androne* leads to the *loggia* and courtyard, with the staircase located on the right extreme of the *loggia*. The other sketch presents a “*ricetto*” or larger room as an atrium, now occupying the space of the *androne* and the two side rooms on the previous plan. The different strategy for the entrance result in different positions for the *sala* above: marked with crossed lines, it follows the street alignment in the first plan and the main compositional axis in the second.

On the sheet U 1235 (*fig. 64*), Sangallo designed four different house plans and a palace facade. The smaller plan seems to be for a “*casa*” as it presents a more informal arrangement. The other three plans follow Antonio’s compositional schemes for palaces. These examples may be models for four categories of urban houses of different sizes (facades are respectively 27, 28, 34 and 40 braccia wide). The second largest palace presents an atrium, and the *sala* (marked with crossed lines) is placed in a longitudinal position, opening to courtyard and street.<sup>5</sup> The third largest palace is entered through an *androne* and therefore, the *sala* (also indicated with crossed lines) is transversally oriented. The smaller house does not have a specific entrance space, but the largest palace receives a full atrium with two rows of columns. Being the most elaborated solution, the largest alternative has its axial sequence of “*Vitruvian*” spaces named by Sangallo (“*vestibolo*,” “*atrio*,”

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<sup>5</sup>On Sangallo’s use of crossed lines, see note n. 7.

“peristilio,” “cavo edio”).<sup>6</sup> Therefore, on this sheet we find three categories of entrance spaces for minor palaces, from the simplest to the more sophisticated: androne, atrium without columns and columnar atrium.

The examples of plans on the sheets above mentioned (U 960 and U 1235) allow us to conclude that when Sangallo uses the atrium on the ground floor of a minor palace, he places the sala in a longitudinal position, generally coinciding with the walls of the atrium below and opening to street and courtyard. This solution is probably employed in other palace plans with atriums where no crossed lines were drawn (G. F. Rosati, G. Rosati, Pucci; *figs. 29, 30, 60*). However, when Sangallo defines an androne as the entrance to the palace, the sala is placed in a transversal position on the piano nobile, with its major dimension along the street facade. This is the solution that Sangallo most frequently adopted.

Transversally placed “sale” generally occupy the three central bays of the palace, as in the drawings for the palazzi Crispo (*fig. 61*), Vescovo di Cervia (*fig. 51*), Orsini (*fig. 57*) and Sangallo (*fig. 42*).<sup>7</sup> In a larger palace such as the Cantelli in Parma (*fig. 54*), the transversal sala occupies the five central bays. However, in some other occasions, Sangallo places the sala on one of the sides of the entrance block, always comprising the space from the androne to one of the extremes of the ground floor. This is the case with the palazzi Baldassini, Le Roy and one of the palace plans in U 1235 (*figs. 31, 32, 64*). A central location of the sala would be

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<sup>6</sup>Sangallo did the same in other sheets, like in the finished plans for the Palazzo Pucci in Orvieto (U 969) and for his house in Via Giulia (U 1224), making explicit his concern to attribute Vitruvian authority to his axial scheme of composition.

<sup>7</sup>All sheets here quoted are ground floor plans which have crossed lines marking the location of the “sala” on the piano nobile, a convention used by Sangallo. In the plans for the palazzi Orsini, Cantelli and Sangallo (U 1004, 1303 and 991), crossed lines and written information confirm the position of the sala.

the “ideal” position, harmonizing with a symmetric arrangement. However, if the sala was placed on one extreme of the facade block, there would be more space available to arrange the “appartamento” of the owner on the other side (as demonstrated in the Palazzo Baldassini). In plots with small frontages, it would be difficult to place a transversal sala in the middle of the facade block. The fact is that in Sangallo’s built palaces, transversally oriented “sale” are usually located on one side rather than in the center of the facade block (as in the palazzi Baldassini, Le Roy, Farnese and the two built residences in the Via Giulia). On the other hand, Antonio’s longitudinal “sale” are placed in the middle of the piano nobile plan, in correspondence with the atrium below.

### **The courtyard**

Sangallo’s effort to reconstruct the Vitruvian house in his palace plans was already mentioned. The words “atrio,” “peristilio” and “cavo edio” employed in some plans (U 969, 1224, 1235; *figs.* 28, 30, 64) reveal the architect’s inspiration in Ancient models. The two last words are related to the design of the courtyard (peristyle and cavaedium), referring respectively to the columnar porticoes and the open space enclosed by them.<sup>8</sup> The results of Antonio’s research do not ignore the traditions of 15th century palace courtyards in Central Italy, shown in the peristyles of the palazzi Medici and Strozzi in Florence and the palazzi Venezia and della Cancelleria in Rome. However, Sangallo is responsible for the definition of the 16th century Roman palace courtyard, in its combination of precise classical discipline and flexibility of arrangement. Whenever possible, he employs a classical peristyle, as in the Palazzo Farnese and the projects for the palazzi Cantelli and Pucci (*figs.* 30, 53, 54). These courtyards are different from 15th century solutions:

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<sup>8</sup>Sangallo’s terminology is not totally precise; see Pellecchia, 1992: pp. 377-416.

Sangallo sought a more precise classical discipline by applying the Colosseum theme of a grid of superposed orders framing a system of arched openings. Concerning its use in palace architecture, the incomplete courtyard of the Palazzo Venezia is the most immediate precedent. But in the palazzi Baldassini and Farnese, Sangallo introduces a more flexible system, in which the different levels and sides could be opened with arches and half-columns or walled with the classical articulation applied over.

The expensive solution of the peristyle was only possible in large palaces. In smaller commissions, Sangallo employed a simplified version of the same courtyard, where the loggia was restricted to the front block while the classical articulation was extended as a relief motif to the other sides. The Palazzo Baldassini was the first example of this strategy, and Sangallo maintained it in most of his palace commissions afterwards. He preferred a perfect square for the courtyard, and so it is in many of his palaces, both large (Farnese, Cantelli; *figs.* 53, 54) and small (Baldassini, Le Roy, Turini, Farratini, Casa Sangallo in U 1092 and U 1224; and Palazzo Sangallo in U 991; *see figs.* 27, 28, 31, 32, 47, 56, 62). But in some cases where the plot's geometry did not allow a square courtyard, a rectangle was adopted: examples are the palazzi Pucci, Vescovo di Cervia and Orsini (*figs.* 30, 51, 57).

### **Presence of shops**

Another aspect of the minor palace plan is related to the presence of shops on the ground floor. Most of the palaces designed by Sangallo have private rooms rather than shops on both sides of the main entrance. It is generally assumed that the preference of most owners was to avoid having shops in their palaces,<sup>9</sup> and that

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<sup>9</sup>Goldthwaite, 1973: p. 111.

would explain why many minor palaces in 16th century Rome do not have them. However, this interpretation should be questioned in the light of other factors, such as a remark on Serlio's Seventh Book and the presence of shops in the Palazzo della Cancelleria (see "Introduction," page 26). Shops seem to be adopted when they are needed as a source of income and also when the location of the palace is particularly attractive for commercial activity. The second reason is evident in the case of the three examples of palaces with shops designed by Sangallo: Palazzo Orsini in Piazza Nicosia (*fig. 57*), Palazzo del Vescovo di Cervia (*fig. 51*) and Palazzo Sangallo (*fig. 42*), all located in Rome. But sometimes Antonio's clients avoided the use of shops, even in favorable locations. Sangallo's plan for the Palazzo Turini has no shops, and was designed for the same area (Piazza Nicosia) of the Palazzo Orsini, which has six shops (*figs. 56, 57*). The three Massimo brothers started to build their palaces in 1533, all located around the corner of the Via Papale with Via del Paradiso (the one for Luca Massimo was designed by Sangallo). None of them has shops, despite all being built facing the Palazzo Pichi which had shops occupying the three sides of its ground floor (*fig. 18*). Starting his palace before 1510 and building it by parts, Girolamo Pichi probably needed the shops to carry on his enterprise, which was not the case with a traditional Roman family of bankers like the Massimi.<sup>10</sup>

### **The "villa-palace" plan**

A remark should be made about plans for palaces in small towns. Many little cities and villages of the Papal States were located on top of hills or ranges of mountains. Such locations gave the town a commanding position in the

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<sup>10</sup>On the Palazzo Pichi, see Valtieri, 1988: pp. 75-98; also Frommel, 1973 (vol. 2): pp. 255-261.

surrounding territory, being easier to defend in case of war. Palaces in these cities are generally located on slopes, requiring the building of substructures in order to create an artificial platform where the ground floor and piano nobile of the residence would be raised. The logical implication is that these plans are less extended longitudinally than regular palace plans in larger cities. As owners of large houses in small towns generally have agricultural holdings in the surrounding areas, such palaces acquire a certain “villa” character, and the substructures are usually employed as large cellars for wine and grain storage. Moreover, a palace located on a slope usually provides a panoramic view of the surrounding area from a vantage point. Therefore, a more “open” approach to planning was favored by 16th century architects in such conditions, and probably the great prototype is the Palazzo Piccolomini in Pienza (1459-62) with its three levels of loggias and rear garden overlooking the landscape. Sangallo’s palaces of this kind generally present his usual compositional scheme, except for the absence or reduction of the rear block to avoid excessive longitudinal extension and to open the panoramic view to most rooms of the palace. The walls of the central open space continue to be treated as a courtyard. Examples of this kind of plan are the Palazzo Farratini in Amelia (*fig. 62*), Palazzo Crispo in Orvieto (*fig. 61*) and the two palazzi Rosati in Fermo (*fig. 60*).

### **Process of design**

How does Antonio reach the final plan arrangement for a minor palace? The large collection of drawings by him contains few examples of plan sketches. The sheet U 1235 (*fig. 64*) presents four plan sketches for urban houses, but each of them is an independent project with different dimensions, not characterizing a sequence of sketch studies for a single project. The sheet U 1047 (*fig. 58*) contains

two plan sketches for small palaces for the Rosati brothers in Fermo: again, these are not studies for the final arrangement of the buildings but rather provisional plans with a complete set of measurements for execution. The sheet U 984 (recto and verso; *figs. 43, 44*) contains 16 study sketches for the Palazzo Sangallo, but these plans are limited to the central area of the palace, comprising courtyard, loggia and staircase. This might be due to the use of structures previously built on the site, to which Sangallo planned to add a new core. The fact is that this set of 16 sketches is the only instance in Sangallo's drawings where he made multiple studies trying to find a satisfactory solution for a palace plan. On the sheet U 960 (*fig. 61*), he made two plan sketches for the palace for Tiberio Crispo in Orvieto, and these plans seem to be studies considering two different alternatives (one with androne, another with an atrium). It is possible that Sangallo used to start most of his palace designs with sketches like these, but few have survived. However, his scheme of composition might have made the use of plan sketches less important: with the basic arrangement of the palace already predetermined, investigation would be restricted to the adjustment of the rooms and spaces to the configuration of the plot. Variety would be achieved by a few elements such as type of atrium, shape of courtyard, location of the "sala" and the type of classical articulation to be employed.

Other drawings seem to confirm that plan sketch studies were not extensively used before the last years of Sangallo's career. Apart from relying on his typical scheme of composition, Antonio used to define a plan by working on a survey sheet containing the outline of the plot and built structures existing on it. After the survey was made, he had it copied on a clean sheet and then proceeded outlining a plan proposal on it. This is the case with the projects for the Palazzo Turini in Rome (1518-26) and the Palazzo Pucci in Orvieto (1528-34). In the

Roman small palace, the survey of the area is on U 996, while in U 997 the plan proposal is drawn over the copy (*figs. 55, 56*). In the case of the Palazzo Pucci, the survey is on U 1070, while sheets U 968 and 969 show respectively a plan study and a finished plan drawn over an enlarged version of the survey (including the streets around the plot; see *figs. 29, 30*). Despite the presence of built structures on the survey and the inclusion of surrounding streets and blocks, Sangallo's attitude is far from contextualist: once the borders for the plan are established, he simply defines a rectangle and set his traditional scheme inside.

In fact, Antonio's straightforward approach to palace commissions might come out of a sense of confidence in his compositional system. The simple application of a method inspired in Bramante's Palazzo Castellesi and linked to the previous tradition of palace planning was the safest and least complicated way to cope with recurrent commissions for minor palaces. The formula would acquire a distinctive character through the sophistication of certain areas such as the atrium and the courtyard. It was only late in his career that a more speculative approach comes up, which might be the result of Sangallo's association with Peruzzi at St. Peter's workshop. The built version of his house in Via Giulia and the set of drawings for his palace are the evidences of such change, as Antonio abandons the axial-symmetrical scheme to test more varied alternatives of plan arrangement.



## CHAPTER 6 - Baldassare Peruzzi

The Sienese Peruzzi was a contemporary of Antonio da Sangallo the Younger, having worked with him for many years as “coadjutore” at the workshop of St. Peter’s in Rome. However, Peruzzi was a very different personality when compared to Sangallo. While the second never left Rome and the Papal court after arriving from Florence when still young, Peruzzi worked in different places (mostly Siena and Rome, but also Bologna and Carpi). Both architects worked extensively with fortifications (Peruzzi in the Sienese territory; Sangallo in Rome and the whole Papal States) and also distinguish themselves in works of engineering: Antonio in the well of San Patrizio in Orvieto (1527-37), a double spiral staircase structure 61 meters deep, and Peruzzi in the projects for a dam in the Bruna river (1532-34). However, contrary to Sangallo, Peruzzi was a painter, and his artistic side was a very important aspect of his architectural career. His criticism of Vitruvius quoted by Cellini illustrates the point:

*...molte volte disse que cognosceva que Vitruvio non aveva scelto di queste belle maniere la più bella, sì come quello que non era nè pittore nè scultore; la qual cosa lo faceva incognito del più bello di questa mirabile arte.<sup>1</sup>*

Peruzzi’s “artistic” conception of architecture might come from his formative background, connected to the influence of Francesco di Giorgio in late 15th century Siena. Despite his experiences in Rome with Bramante, Raphael and Sangallo, Peruzzi was always selective in receiving their influence in his architecture. He developed a personal approach which incorporates the language of

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<sup>1</sup>Cellini, Benvenuto. *I tratatti dell’Oreficia e della Scultura*. Florence, 1893: p. 224.

the Roman masters but is less concerned with their architectural syntax, focused on symmetry, axuality and spatial continuity.<sup>2</sup> This is the reason why Peruzzi's palace plans are distinguished from his contemporaries.

In contrast to Sangallo, Peruzzi's career cannot be presented as a prefiguration of the modern professional architect. Rather than limiting himself to architectural design and organizing a workshop with assistants to help developing projects, the Sienese worked independently, as a painter, designer, builder and engineer. A devoted student of Vitruvius and Roman antiquities like many of his contemporaries, Peruzzi probably never intended to develop a system of architectural composition based on it. One of the reasons for an architect to create such a system is the recurrence of similar commissions, in order to improve design efficiency. However, documentary evidence available on Peruzzi's works suggests that he was involved with a smaller number of commissions than Sangallo. He designed only a few minor palaces: Palazzo Fusconi-Pighini, Rome (1520-25, destroyed); Palazzo Ossoli-Missini, Rome (1520-27; attribution); Palazzo Lambertini, Bologna (1522-23, project); Palazzo Pollini, Siena (1527-35); Palazzo Pietro Massimo, Rome (1533-36); and Palazzo Ricci, Montepulciano (1535, project). Some unidentified drawings in the Uffizi collection may be added to the list: U 546, 597, 598, 628 and 651.<sup>3</sup>

The smaller number of minor palaces designed by Peruzzi makes more difficult to find specific planning "themes" in his work, such as Sangallo's axial system or his types of atriums and courtyards. However, his drawings for the

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<sup>2</sup>See Frommel, C. "Palazzo Massimo alle Collone" in Fagiolo, M. and Madonna, M. L. (eds.). *Baldassare Peruzzi: pittura scena e architettura nel Cinquecento*. Rome, 1987: p. 261.

<sup>3</sup>Peruzzi's drawings were published in Wurm, Heinrich. *Baldassare Peruzzi. Architekturzeichnungen*. Tübingen, 1984.

Palazzo Ricci (seen in chapter 3) show that he was concerned with a procedure to organize the planning of a palace commission.

### **Peruzzi's arrangement of minor palace plans**

In his Roman works before the Sack (1527), Peruzzi does not distance himself from the Sangallesque planning tradition. Such observation is based on the attribution of the Palazzo Ossoli-Missini to him (1520-27; *fig. 78*)<sup>4</sup> and also on the available drawings providing a partial reconstruction of the plan of the Palazzo Fusconi-Pighini (1520-25; *figs. 79, 80*).<sup>5</sup> Both palaces have a narrow frontage (Ossoli: 17m; Fusconi: c. 18m), divided in the middle by the androne, with one room on each side (there are no shops). The androne ends in a three-bay loggia, followed by the courtyard. In the Palazzo Ossoli, the staircase is on the right side of the loggia, while in the Palazzo Fusconi it is on the left side. The rear parts of these palaces were different: in the Palazzo Ossoli, the small dimensions of the plot (17 x 23m) determined a compact plan, where the palace occupies the whole area, except for the small central courtyard (7.50 x 7.50m). The longer plot facing Piazza Farnese determined a different approach in the Palazzo Fusconi, with more extended wings and a courtyard/garden in the middle.

The project for the palace of Count Cornelio Lambertini in Bologna is documented in three sheets: U 354 (survey), U 352 (first proposal) and U 353 (second proposal; *fig. 77*). Peruzzi is here remodeling his client's house, and the two plan proposals maintain much of the previous disposition (this might be due

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<sup>4</sup>The palace has been traditionally attributed to Peruzzi. For a more recent discussion, see Frommel, 1973, vol. 2: p. 254.

<sup>5</sup>See the essays by Bruschi, 1986: pp. 11-30; and Repetto, M. D. "La trasformazione di Alessandro Specchi in palazzo Fusconi-Pighini" in *Architettura. Historia e documenti*. 1986/2: pp. 31-46.

to financial limitations). Apart from the two plans, the architect also offers three alternatives for the courtyard loggia: with two columns, with four columns or with two piers and attached pilasters. In each case, the articulation is extended as a relief motif to the other three sides of the courtyard. The rest of the plan is similar in both proposals: shops occupy the front block, with the long androne giving access to the interior, where the staircase is on the left side and the courtyard on the right.

Peruzzi's most famous palace commission is the Palazzo Pietro Massimo, or Massimo alle Colonne, started in 1533 in Rome.<sup>6</sup> The first proposal for the palace keeps much of the disposition of the older house (as Peruzzi writes on the sheet: "muro vechio," "camara facta," "cortile vechio" and also some "da farsi" for what is to be built; see *fig. 81*). This is an "economic" alternative for Pietro Massimo's residence. The palace finally built is less respectful of the older house, implying that the owner decided to spend more on it (*fig. 82, 83*). However, Peruzzi did not feel obliged to impose any preconceived scheme on the plot, even when Sangallo and Giovanni Mangone were using axial-symmetrical plans in the palaces for Pietro's brothers Angelo and Luca. Many "circumstantialities" were maintained, such as the off-centre androne, the row of rooms on the left side, the large room on the right of the entrance ("triclinio") and the room corresponding to the tower ("torre"). Rather than one loggia connecting front and back, the courtyard now has two loggias facing each other across the open space. Peruzzi "regularizes" some parts of the palaces, such as the facade (where the addition of a portion from Angelo's plot allows for the central position of the portico) and the geometry of the

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<sup>6</sup>Frommel, 1973 (vol. 2): pp. 233-250; Frommel, 1987: pp. 241-262; Wilson Jones, Mark. "Palazzo Massimo and Baldassare Peruzzi's approach to architectural design" in *Architectural History* n. 31 (1988): pp. 59-87.

courtyard (which now is approximately rectangular). But even these “corrections” are not totally “regular”: the androne is not aligned to the central bay of the facade portico, and the elevations of the courtyard are all different. It would not be difficult for Peruzzi to dislocate his androne to the central bay of the courtyard: his large “triclinio” might be placed on the left of the new androne, and he would have a symmetrical plan without requiring an extension of the facade. But probably this would be too “obvious” for him as a spatial arrangement in these circumstances, and his idea of the curved facade would probably be lost.

It remains for the set of drawings for the Palazzo Ricci in Montepulciano to show Peruzzi’s strategies of plan composition in a more effective way (see chapter 3). In this group of drawings, the architect shows what his other works suggest: few things are predetermined in terms of arrangement, position and shape of the elements of a palace. Obviously, Peruzzi follows the tradition in its basic principles: his palaces always have a frontal block with family quarters, the sala facing the street on the piano nobile, an open space behind the front block with a loggia, and service locations on the rear parts. Apart from that, the architect explores many different arrangements, and this is shown in the nine sketches on U 359 and U 355v and the six in U 356v and U 594 (see *figs. 68, 69, 73, 74*).

### **Principles of composition**

In terms of principles of composition, symmetric arrangements seem to be preferred by Peruzzi: in fact, only one scheme among the 15 plan sketches for the Palazzo Ricci is asymmetric. However, in six of the eight symmetric schemes in the first group of plan sketches, Peruzzi dissimulates the perception of symmetry through the treatment of the courtyard. The visitor enters the palace through a central atrium/androne. However, in reaching the courtyard, the visitor perceives

that the sense of symmetry vanishes, as each side of the courtyard is treated differently and no emphasis is given to the continuation of the longitudinal axis. The second set of plans is more firmly attached to symmetry, as Peruzzi now has a larger area to accommodate the program of the palace according to an ideal scheme. The contrast with the Palazzo Massimo is significant: in his first three finished plans for the Palazzo Ricci (U 355r, 356r and 357; *figs. 70-72*), Peruzzi defines a right angle at the left side corner of the plot on via Ricci. From this angle, he creates an orthogonal grid of lines which serves to orient the conception of the whole plan. On the two borders which remain oblique to the grid, Peruzzi adjusts the spaces through the varying thickness of the walls and the placing of small elements such as latrines, fireplaces or cabinets. On the second set of finished plans (U 358 and 595; *figs. 75, 76*), the architect keeps using the grid as an instrument of planning. The proposal on U 595 is the most axial of all in this project. The conclusion is that in this commission where no remaining structures on site were to be incorporated in the new palace, Peruzzi tends to employ a more systematic and less circumstantial approach to planning.

Such “regularity” is not unfamiliar to Peruzzi’s palace architecture when one considers the plans for the Palazzo Fusconi (*fig. 79, 80*) and for the Palazzo Ossoli (*fig. 78*). In other cases such as the Palazzo Pietro Massimo (*fig. 83*) and the Palazzo Savelli (built within the ruins of the theater of Marcellus in Rome) the structures remaining on the plot played an important role in the definition of the design. The curved profile of the facade of the Palazzo Massimo can be related to the substructures of the odeon of Domitian present on the site. Peruzzi seized the circumstances of his commissions and used them as creative tools to confer originality to the solution. However, when such circumstances are lacking, the

architect adopts a more systematic approach, where abstract rules of composition have a greater influence.

### **Process of design**

It was mentioned above that Peruzzi used orthogonal grids and sometimes axial/symmetrical dispositions in his plans, which would make his design method similar to Sangallo's. In fact, the drawings for the Palazzo Ricci show that despite the use of similar techniques, the design procedures employed by both architects were quite different. Where Sangallo set limits to the creative process by introducing a preordained plan scheme, Peruzzi opens it up in his investigative sketches. Sangallo advances by adjusting his scheme to the circumstances of the commission, while Peruzzi is able to avoid such adjustments in the early stages of the design process in order to focus on composition through plan sketches. Later, selected plan schemes are adjusted to the plot. Sangallo's orthogonal system of axes serves to define the plan on the plot, while Peruzzi's grid serves only to adjust ideas gotten from his sketches to the dimensions of the site. Sangallo is concerned with the creation of a system of architectural planning which sets in advance the general arrangement of the building. Peruzzi, on the other hand, is more concerned with defining a procedure, an approach to palace planning which fosters creativity without developing into a system.

The fact that U 595 (*fig. 76*) is a symmetric and axial scheme for the Palazzo Ricci does not mean that Peruzzi is adopting Sangallo's procedures; it means that schemes like Sangallo's participate in Peruzzi's repertory of plan solutions, and may eventually be adopted. However, more than any finished plan prepared by them, it is the role of sketches that distinguish the two architects.

Sangallo's formula is effective as it simplifies the process of conception and guarantees an expedient and well-organized plan proposal which can acquire distinction through a unified system of classical articulation of its main spaces. More than creating alternatives, Sangallo evolves from one plan to another until reaching the final one. On the other hand, in using sketches Peruzzi chooses the more complex way of generating different proposals in a simplified form, and then selecting from them the most promising ones to be developed into finished plans. In the sequence of drawings for the Palazzo Ricci, the Sienese architect offers a demonstration of his methods of planning that has not been generally realized. The Palazzo Pietro Massimo has been interpreted as the evidence to understand Peruzzi as an artist who refused formulas, designing each building as if it was a singular work of art.<sup>7</sup> This is probably true concerning his use of classical orders, but does not reflect his whole work as a palace planner. The circumstances of Pietro Massimo's commission served to show the flexibility and artistry of Peruzzi's approach, while the less sophisticated house in Montepulciano reveals the planning procedures of a professional architect, which being instrumental to conception, empower his creative abilities.

Sangallo and Peruzzi's approaches can be detected even in contemporary architectural practice: one is favored by architects choosing a professional specialization in certain types of buildings and therefore concentrated on design efficiency and final product quality; the other is preferred by architects more focused on the artistic side of the profession, to whom new commissions serve to develop previous conceptions into innovative solutions. While Sangallo left many

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<sup>7</sup>See Lotz, Wolfgang. *Architecture in Italy: 1500-1600*. New Haven, 1995 (orig. 1974): p. 51.



built palaces to illustrate his method, Peruzzi did only a few, which prevent us from grasping the full potential of his palace architecture, announced so clearly in the Palazzo Massimo and in the project for the Palazzo Ricci.

## CHAPTER 7 - Andrea Palladio

Palladio was already introduced as a prefiguration of the modern professional architect, due to the amount of work he did for private clients (see chapter 4). In this sense, Palladio's profile is very similar to Sangallo the Younger. The advantage of Palladio is that he was able to combine two different worlds: the architectural traditions of the Veneto and the most advanced achievements of Renaissance Rome in the 16th century. Such synthesis allowed him to define a radically new approach to residential architecture which deeply influenced later developments in this field in many parts of the world.

### Principles of composition

Dealing with a large number of commissions for villas and palaces, Palladio developed a system of composition for their planning. Being located in open areas with few constraints, the villas offered the most convenient opportunity for the creation and application of a system of planning. Wittkower's illustration of twelve schemes of Palladio's villas has become famous (*fig. 103*), and Rowe has even linked Palladio's plan schemes to Le Corbusier's villas.<sup>1</sup> Such scheme was based on a strict adherence to symmetry: both sides of the building should be equal, both in plan and facade. In fact, Palladio's "ideal" scheme employs biaxial symmetry, and its most clear expression is the Villa Capra or Rotonda, near Vicenza (1565-69, *fig. 104*). The scheme of the centralized pavilion with four porticoes and a dome was also used in the project for the Villa Trissino ("Quattro Libri," book 2, p. 60) and

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<sup>1</sup>See Wittkower, Rudolf. *Architectural principles in the age of Humanism*. London, 1988 (orig. 1949), part 3; and Rowe, Colin. *The mathematics of the ideal villa and other essays*. Cambridge, 1976: pp. 1-28.

in the reconstructions of the temple of Fortuna Primigenia in Palestrina (RIBA IX/7 and IX/8). It was mentioned earlier that Palladio sometimes tried to apply such scheme to urban palaces, as in the Palazzo Della Torre in Piazza Brà, in Verona (“Quattro Libri,” book 2, p. 76) and even in constrained sites, such as in one alternative for the Palazzo Barbaran (RIBA XVI/14 A, *fig. 98*). In these cases of urban houses, Palladio places the entrance hall (“entrata”) and the sala above in the center of the plan. However, the problems of this scheme in urban locations caused it to remain only on paper.<sup>2</sup>

Symmetry is an absolute for Palladio’s plans of villas and palaces. In book 1, chapter XXI of the “Quattro Libri,” he states that “rooms must be distributed at either side of the entrance and the hall (“sala”), and one must ensure that those on the right correspond and are equal to those on the left so that the building will be the same on one side as on the other . . . ”<sup>3</sup> Compared to Sangallo the Younger, Palladio’s use of symmetry is less explicitly axial, and more spatial. Sangallo makes the axes more evident through the disposition of the architectural elements (corridors, arches, openings) while Palladio tends to neutralize the axes using ample spaces in the center of the composition and porticoes with straight entablatures. Rather than a visible architectural feature in itself, symmetry for Palladio seems to be an organizing principle.

Palladio developed different kinds of approaches to commissions of palaces, which can be classified in four basic categories.<sup>4</sup> The first type (“A”) comprises the

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<sup>2</sup>For a discussion of the problem, see chapter 4, pages 93-94, 100-101, 103.

<sup>3</sup>Palladio, Andrea. *The four books on architecture* (Tavernor and Schofield ed.). Cambridge, 1997: p. 57. The source is Alberti’s *Da Re Aedificatoria*, book IX, chapter VII.

<sup>4</sup>Carboneri, Nino. “Spazi e planimetrie nel palazzo palladiano” in *Bollettino CISA* vol. XIV (1972): pp. 165-186.

palaces laterally expanded, and the examples are the palazzi Civena, Chiericati and Della Torre a Porta Borsari, Verona (*fig. 105*). The second type (“B”) is the monumental square palace with a courtyard, such as the palazzi Thiene and Trissino (*fig. 106*). The third category (“C”) comprises more compact plans without a courtyard, which are very similar to villa plans, like the palazzi Garzadori, Antonini and Pisani (*fig. 107*). The fourth group (“D”) comprises the longitudinal palaces, such as the palazzi Porto, Angaran, Valmarana, Barbaran and Capra (*fig. 108, 109*). The last group includes the largest number of Palladio’s palaces, as it reflects the most common situation for an urban site (a longitudinal plot with the narrow side facing a street). As the site was crucial in defining the strategy of design for Palladio, it is no surprise that each of these plan categories is related to the geometry of the plot and its urban position.<sup>5</sup> Laterally expanded palaces fit in plots with a larger side facing the street or an open space; palaces with a square plan and central courtyard are reserved for monumental commissions; palaces with square plans without a courtyard are generally suburban, with certain features of a villa; while longitudinal palaces occupy longitudinal plots. Palladio’s sensibility to the different circumstances of a palace commission lead him to create these subcategories of plan arrangement to cope with each case.

The most simple solution for a minor palace arrangement is given in plan type C (*fig. 107*). In this kind of plan, Palladio directly applies the formula for the central block of a villa to an urban palace. However, most plots in central areas of towns present difficulties for such a cubic, self-contained proposal. In these cases, Palladio tries to extend the villa scheme (“C”) to fit the length of the plot, by adding an androne and placing the hall/sala unit in the center of the plan and a loggia or second androne in the back. The model for such solution for constrained

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<sup>5</sup>See note 13 in chapter 4.

urban sites is shown in the “Quattro Libri” plates for the Palazzo Capra (fig. 119). The sheet RIBA XI/22v shows Palladio’s preference for this approach in 15 plan sketches (fig. 89). The same solution is also seen in two of the plans on RIBA XVI/9r (fig. 96) and in one of the alternatives for the Palazzo Barbaran (RIBA XVI/14 A; fig. 98). However, in the final arrangement for the Palazzo Barbaran (published in the “Quattro Libri,” fig. 101), Palladio abandoned the central hall and adapted the “villa-plan” to the plot by “projecting” the right side of the block backwards.<sup>6</sup> He maintains the unit hall/sala in front and defines a walled open area in the back, abandoning the centralized scheme.

### **Palladio’s “entrata” and “sala”**

The unit entrance hall (“entrata”) and sala, the first on the ground floor and the second corresponding to the first on the piano nobile, are very important in Palladio’s planning strategy. The architect explains it in the “Quattro Libri (book 1, chapter XXI):

*Besides these, all well-designed houses have places in the middle and in the most beautiful parts which all the others correspond to and can be reached from. These places in the lower story are popularly called entrances and those in the upper story, halls (“sale”). The entrances are, as it were, public spaces and serve as a place where those waiting for the master to come out of his lodgings can stand to greet him and do business with him, and they are the first part (beyond the loggias) which anyone entering the house is presented with. Halls (“sale”) are designed for parties, banquets, as the sets for acting out comedies, weddings and similar entertainments, and so these spaces must be much larger than the others and must*

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<sup>6</sup>The “projection” was in fact the incorporation of a built structure to the new house.

*have a shape that will be as capacious as possible so that many people can gather in them comfortably and observe what is going on.*<sup>7</sup>

Here Palladio states the primary role of these two spaces (entrance hall and sala) as coordinators of the whole composition of a house. All other spaces should be distributed around these two large rooms. The hall/sala unit is to be “in the middle,” and here Palladio’s preference for a large central room organizing the plan is made clear. The functions of these two rooms is also presented, comprising the most ceremonial aspects of domestic and social life. Usually, Palladio’s entrance halls have columns (needed to support the large sala above) and sometimes vaults resting on them. These features give to the entrance area a sense of solemnity and reduce the perception of the largeness of the room. The sala above has no columns: they are not needed structurally, but most important (according to Palladio), the sala must be as unobstructed as possible, as “people can observe what is going on” during parties, spectacles or ceremonies. The form of these rooms is also prescribed in the “Quattro Libri” (Book 1, chapter XXI): the closer from the square, the better, and the largest size should be the double square.

Palladio’s entrance halls are generally based on the scheme of the “hall with four columns” (“Quattro Libri,” book II, chapter VIII), but the way he manipulates the components of such scheme produced a number of variations (*fig. 112*). It is interesting to compare these spaces with the atriums designed by Antonio da Sangallo the Younger (*fig. 59*). While Sangallo intends to recreate the Vitruvian atrium in his palaces, Palladio never describes his entrance halls as atriums. In the “Quattro Libri,” his room with four columns is placed after the chapters with the reconstruction of Vitruvian atriums: Palladio is here stating that his entrance hall is

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<sup>7</sup>Palladio, 1997: p. 57.

inspired by the Ancient Roman models, but different from them to fit in a 16th century house in the Veneto. There are two sources for this innovation: one is the reconstruction of the Ancient Roman house provided in Daniele Barbaro's translation and commentary of Vitruvius first published in 1556, illustrated by Palladio (*fig. 113, 114*).<sup>8</sup> Working in collaboration with Barbaro, Palladio was in much better conditions to reinterpret the Vitruvian atrium accurately than Sangallo, who generally followed Fra Giocondo's "basilical atrium." Palladio was conscious that the Ancient atrium was a large room with social functions, while the Sangallesque atrium was usually an elegant passageway into the house.<sup>9</sup> But the second source for the Palladian entrance hall is found in the palace tradition of the Veneto, where the main access was through a large hall with a gate on the street side and a loggia or arch opening to the garden or courtyard behind. Such Medieval solution was common in Vicenza (Palazzo da Schio, Cha Granda in Contra' Porti; *fig. 110*) and it was reinterpreted by Palladio in classical terms with a large columnar hall followed by a narrow andito ending in a loggia.<sup>10</sup> While these Medieval entrances served both as a service access and main entrance to the palace, Palladio's entrance halls have the character of a ceremonial space, leaving to the creation of service entrances behind (as in the final design for the Palazzo Barbaran; *figs. 100, 102*) or the location of some service areas outside the palace

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<sup>8</sup>Barbaro, Daniele. *Vitruvio. I dieci libri dell'architettura tradotti e commentati da Daniele Barbaro*. Milan, 1987. See also Pellecchia, 1992: pp. 412-416.

<sup>9</sup>Exceptions should be mentioned here: Palladio used an androne as a palace entrance a few times (RIBA XI/22v, palazzi Valmarana, Capra), but it is always followed by the entrance hall; on the other hand, Sangallo designed a few large atriums in his palaces (Pal. Pucci, U 969; Casa Sangallo, U 1092; Pal. G. F. Rosati, U 1047).

<sup>10</sup>My thanks to prof. Howard Burns for pointing me out the link between ground floors of Vicentine Medieval palaces and Palladio's palace plans.

(as in the projects for the palazzi Porto and Valmarana). In 15th and early 16th century Venetian palaces, the sala on the piano nobile replicates the large entrance hall on the ground floor. Palladio reinterpreted this traditional arrangement in his entrance hall/sala units, which also comprise two floors.

### **Location of other rooms in the palace**

After discussing the entrance hall and sala, Palladio concludes chapter XXI of his first book with an explanation about the other rooms on the ground floor and piano nobile. The architect stresses the need of a strict correspondence between rooms on the left and on the right side of the entrance hall/sala unit. Rather than recalling Vitruvius and Alberti's analogy with the symmetry of the human body, Palladio justifies the rule with a unique argument: sides with different sizes create structural problems, as the larger side would be weak compared to the small one. The truth in such cases is that the unbalance is essentially visual, proportional and not a problem of construction. There are seven types of smaller rooms on both sides of the hall/sala: the first two are the circular and the square rooms. The other five are different kinds of rectangles: the one formed by the diagonal of a square, the square and a third, the square and a half, the square and two thirds and the double square. In book II, ch. II, p. 4, Palladio is more specific about the use and location of these rooms. Their size should fit into three categories (large, medium and small) and the three are to be placed side by side. Palladio mentions again that the set of three kinds of rooms on one side should correspond with the other side, but he now acknowledges the difficulties presented by the constraints of urban sites. He hopes to provide some advice through his projects illustrated in the treatise. Despite defining seven types of room shapes and three kinds of room sizes, Palladio explains very little about



their function. Apart from the entrance hall and the sala, the small rooms are the only ones to which a use is attributed: they should be divided up to create even smaller rooms, their function varying from studios and libraries to storage spaces. The absence of any information on the specific function of the other rooms might be related to their traditional use (bigger room as main bedchamber but used for receiving people, medium room probably as the real bedchamber) and/or to the multifunctional character of these rooms, which made them adaptable to any role in the house (for guests, wife, children, the owner's parents, etc.). Palladio also has nothing to say about the use of the rooms around the entrance hall on the ground floor, which Cortese had previously recommended for audience halls, guest rooms and summer lodgings.<sup>11</sup>

### **Hierarchy of spaces & location of service areas**

In the beginning of book II of his treatise (chapter II), Palladio writes about the planning ("compartimento") of rooms. He presents there his list of the most important spaces in the residence: loggias, upper halls ("sale"), courtyards, magnificent rooms and large staircases. He follows saying "that the smallest and ugliest parts will be in places that are subordinate to those which are larger and more prestigious."<sup>12</sup> Palladio justifies such classification through an analogy with the members of the human body, where noble and beautiful parts have to coexist with and are dependent on less pleasant ones:

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<sup>11</sup>Cortese, 1980: pp. 78-81. Cortese's book deals with large cardinal palaces in Rome, but the location of parts may reflect a more general procedure in palace planning.

<sup>12</sup>Palladio, 1997: p. 77.

*But, just as our blessed God has arranged our own members so that the most beautiful are in positions most exposed to view and the more unpleasant are hidden, we too when building should place the most important and prestigious parts in full view and the less beautiful in locations concealed as far from our eyes as possible . . .*<sup>13</sup>

The “less beautiful” parts are the service areas, such as cellars (“cantine”), wood stores, pantries, kitchens, smaller dining rooms (“tinelli”), laundries and ovens. Despite their acknowledged usefulness, these parts are hidden by being placed partly underground (in a basement). Three advantages result from this: the ground floor and the piano nobile are kept relatively free from interferences from service functions in social areas, the ground floor is distanced from the dampness of the earth and the whole building is raised, becoming more visible and offering better views from the piano nobile. In fact, to locate all service spaces in a basement is the ideal solution, but this is not always possible. In villas, Palladio varies from services placed in the basement (villas Badoer, Foscari, Capra, Poiana) to services in side blocks (Villa Cornaro), services on the ground floor (Villa Mocenigo), services located on the side wings (Villa Emo) and a combination of them (Villa Saraceno). However, in the city, Palladio often solved the problem by providing a service courtyard on the back of the palace. Such arrangement is found in the Palazzo Capra (fig. 119), Palazzo Barbaran (figs. 99, 100) and Palazzo Angarano (fig. 118). In other cases, areas such as stables are located outside the main body of the palace, as in the original designs for the Palazzo Valmarana (fig. 117) and Palazzo Porto. Suburban palaces sometimes permit less conventional solutions, such as the two side pavilions designed for the Palazzo Pisani in Montagnana (comprising kitchen and servant’s quarters) and the Palazzo

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<sup>13</sup>Palladio, 1997: p. 77, 78.

Antonini, with an unusual volume added to the left side of the house, comprising the kitchen and other service areas (*fig. 120*).

### **Methods of design**

Palladio's methods of design might be described as a combination of Sangallo and Peruzzi's procedures. Palladio's sheet RIBA XI/22v (*fig. 89*) is comparable to Peruzzi's sheet U 359 (*fig. 68*), both presenting numerous plan sketches for a single minor palace commission. The sketch stage seems fundamental for both architects as a planning tool which isolates the design task from the typical constraints of real building for a while and allows concentration on composition. In the small scale and free drawing of their plan sketches, they are able to try different arrangements and various kinds of rooms (for instance, Palladio's entrance halls). Peruzzi proceeds from the sketch stage to the alternative stage, where he selects the best ideas from his sketches and developed them into a few finished plans. Palladio did the same in his work, the most well-know example being the three plans for the Palazzo Barbaran (RIBA XVI/14 A, B, C; *figs. 97*). Therefore, Peruzzi and Palladio seem to agree in employing a method of design with a sequence of definite stages from initial ideas to executive plans.

Sangallo's method of design was much more attached to his planning system: the application of a predetermined scheme was almost immediate, being followed by adjustments and corrections. Palladio also showed some interest in a more systematic approach to planning, revealed in his strict attachment to symmetric correspondence. His plans for central blocks of villas and for minor palaces and also the treatment of some parts of them (like the entrance hall, the sala, the staircases) shows his concern for the creation of an architectural system. However, Palladio's system is not rigid, but flexible and open to invention and

adaptation. His plans for the Palazzo Della Torre (*fig. 122*) and Palazzo Capra (*fig. 119*) show how the basic principles of his palace architecture can be adapted to constrained plots in the city. Based on his studies of Vitruvius and his acquaintance with contemporary Roman architecture, Palladio created a new kind of palace, and its novelty is clearly perceived through the arrangement of the plan. Except for keeping something of the tripartite division of the Venetian palace plan, Palladio departed from tradition led by design considerations, to define a new type of urban house. That is why Palladio regards himself “extremely fortunate to have found gentlemen of such noble and generous character and discriminating judgement that they have been convinced by my arguments and rejected that obsolete approach to building without grace or beauty.”<sup>14</sup>

One of the features of Palladio’s architecture which explains its wide and lasting influence is the combination a more systematic approach to planning (much needed in an emerging private practice) with a method of design which fostered creativity and innovation. The discipline of Sangallo’s method had simplified the task of planning, adapting it to the realities and needs of the 16th century private building enterprise in Rome. Later, the artistry of Peruzzi showed that the issues of minor commissions, urban constraints and design efficiency could be perfectly reconciled with artistic composition. As a professional architect in mid-16th century Northern Italy, Palladio in his palace plans synthesizes and amplifies the contributions to the practice previously established in Rome by Sangallo and Peruzzi.

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<sup>14</sup>Palladio, 1997: Book II, p. 4.

## CONCLUSION

The practice of architecture during the 15th century continued a Medieval tradition: architects were only one of the participants of the process of designing a building, while patrons or building committees had a great influence in design decisions, and could interfere at any moment to make revisions in the project. In great commissions (like churches, public buildings or princely residences), names of architects were sometimes linked to buildings. However, among the large number of private palaces built in 14th and 15th century Florence, no architect is known to be the planner of many: authorship was not exclusively attributed to the architect. Florentine palace tradition seems to have evolved gradually as a collective effort of humanists, learned businessmen, artists and builders.<sup>1</sup> The need to organize the arrangement of the recurrent type of the urban house resulted in the definition of a standard type of plan, centered on the regular courtyard with *androne*, *loggia* and staircase connected to it in a sequence (*fig. 24*).

The situation was radically changed in early 16th century Rome. Progressive research on Ancient Roman architecture through surveys, programs of restoration and also the publication of Vitruvius' editions with illustrations made the Classical heritage available to architects and patrons. The continuous recovery of Papal Rome since mid-15th century in terms of its political importance in European affairs resulted in the formation of a lesser nobility composed of professional men generally connected to the Papal civil service, but also comprising some independent businessmen. This class of learned bureaucrats commissioned many minor palaces in 16th century Rome. They wanted houses similar in appearance to what Roman cardinals were building since the Palazzo della Cancelleria (1485-95).

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<sup>1</sup>See "Introduction," p. 30, 31.

The application of Ancient Roman architectural knowledge to these palaces defines the basic difference between them and their Florentine predecessors. The classical style which was rejected in Florence after Alberti's facade for the Palazzo Rucellai (after 1446) flourished in Rome with Bramante (Palazzo Caprini, 1504-5; Palazzo Fieschi-Sora, 1504-9). However, a unique aspect of early 16th century Roman palaces is their planning arrangement. Florentine planning tradition was given compositional rigor and classical precision in Bramante's plan for Palazzo Castellesi (c. 1500), and the model was systematized for minor palaces by Antonio da Sangallo the Younger, beginning with the Palazzo Baldassini (1514-16). Sangallo developed a biaxial planning scheme which served as a reference for locating the parts of the palace in a visual sequence. He also gave precise definition to some parts of the palace (atrium, loggia, courtyard, staircase) providing a formula which comprised the plan arrangement of the whole building.

The theme of the minor palace commissioned in large numbers determined the transposition of architecture from the domain of the monumental to a wider participation in the fabric of the city. The architect's commitment to his client became progressively focused on the design of the building and the provision of drawings for its execution. Minor palaces were residences in which different functions were arranged in horizontal sequence with a few vertical connections; therefore, drawings of plans were naturally the primary instrument in investigating their organization.

Apart from Sangallo the Younger, other architects such as Raphael, Sansovino, Giulio Romano, Peruzzi and Mangone used and developed the arrangement of the plan introduced by Sangallo in many other commissions for minor palaces. Peruzzi showed the potential of a less rigid approach in the palazzo he designed in Rome for Pietro Massimo in 1533. In relation to planning, Peruzzi

demonstrated an innovative procedure of design through the set of plans for the Palazzo Ricci in Montepulciano (c. 1535). The developments in palace planning in the Papal capital were soon brought to Northern Italy. However, local planning traditions were generally kept in the Veneto until Palladio could provide a new synthesis, materialized in many palaces built in Vicenza and in the plates of the “Quattro Libri.”

The planning procedures embodied in these drawings are an important ingredient in the new form of architectural practice that takes shape in the early 16th century. The increasing demand for minor palaces in Italian cities produced a recurrent type of commission for architects. In order to cope with the specific requirements of these commissions, architects developed new methods of planning aiming at expediting the process of design. These new methods had two aspects: the plan arrangement and the planning process. The first was related to the disposition of different spaces and functions in a building, while the second was related to the process of finding a good disposition for them through drawings of plans. The drawings previously seen illustrate the creation and application of the new methods of planning in minor palaces by Sangallo the Younger, Peruzzi and Palladio. Such new working methods substantially transformed the practice of architecture, resulting in greater autonomy for the architect in conceiving and developing the plan of the minor palace. The contribution of these three architects in shaping the outlook of the private practice of architecture through planning strategies enhances their importance in the history of the profession.





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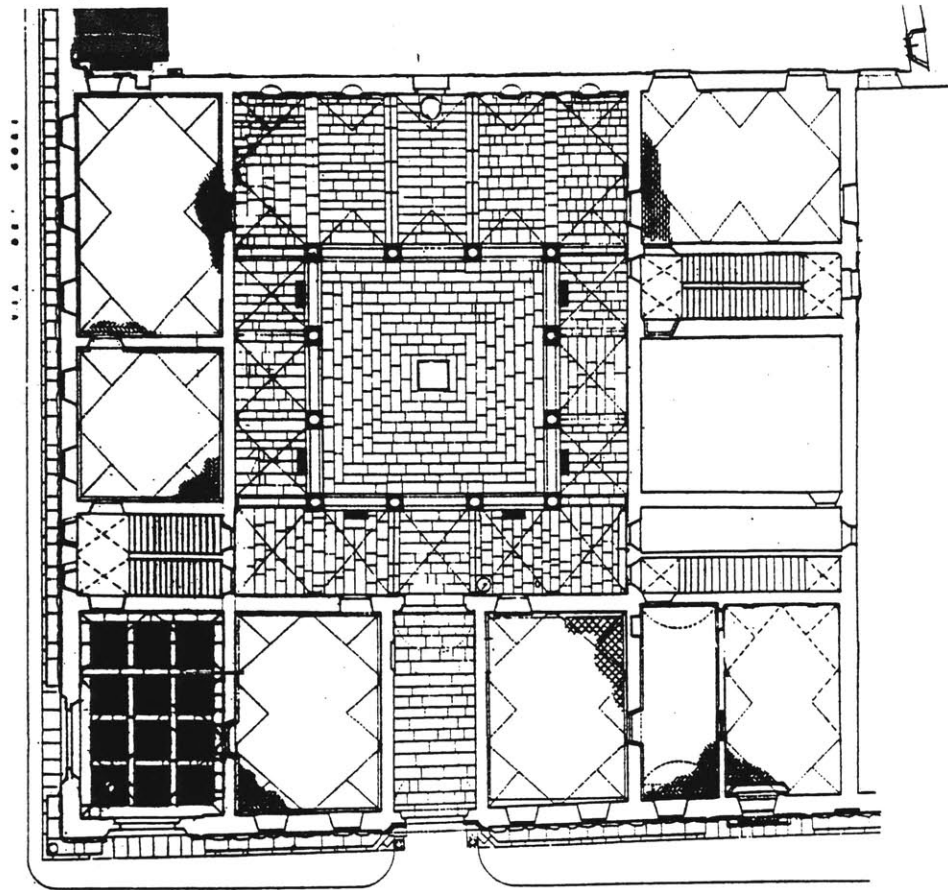
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- Fig. 122 - Andrea Palladio: plan and section of Palazzo Della Torre (from "Quattro Libri")

## ILLUSTRATIONS



- A *Camera grande*
- B *Sala*; subsequently two rooms
- C *Anticamera* behind the bedchamber
- D Private study (*scrittoio*)
- E Wide passage leading from head of staircase direct to the chapel (F) allows access to bedchamber from the side
- F Chapel that could serve as audience chamber
- G Back stairs; precise conformation unclear
- H Courtyard

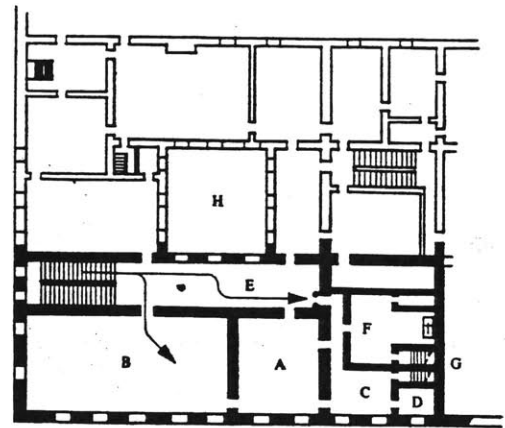


Fig. 1 - Palazzo Medici: plan of ground floor.

Fig. 2 - Palazzo Medici: plan scheme of piano nobile (from Thornton)



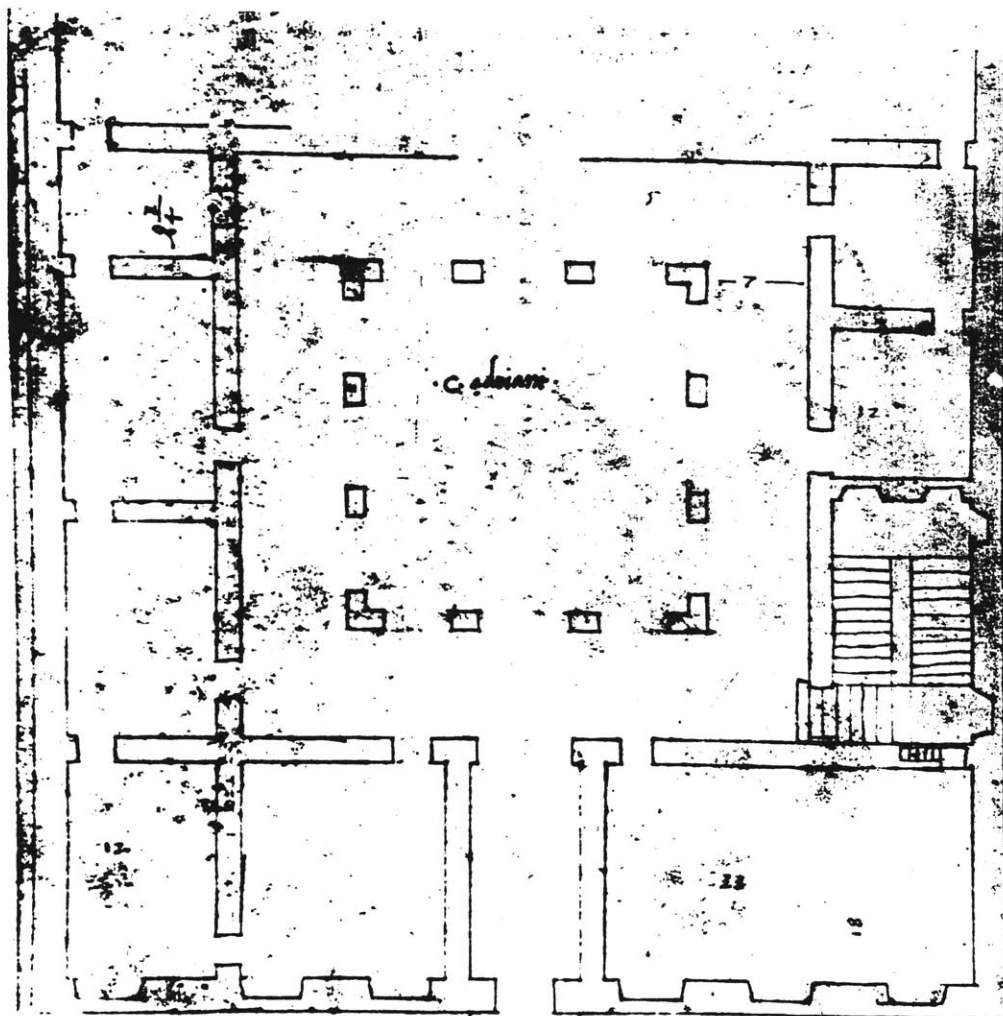
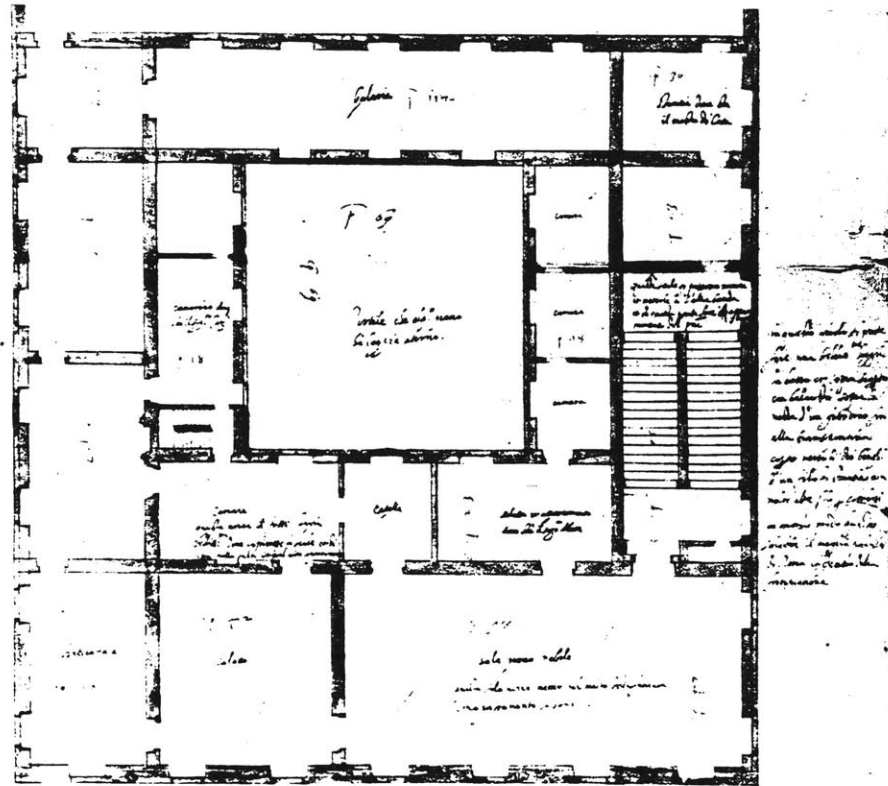


Fig. 3 - Palazzo Castellesi: ground floor plan (Codice Coner, f. 8. London, Soane Museum)



- A The Cardinal's main bedchamber
- B Antechamber
- C Private dining-parlour; called *salotto* on c. 1590 plan
- D Sala
- E Room associated with main bedchamber; *postcamera*?
- F Closet; more public than J
- G Galeria, so called in c. 1590; was this formerly an open *loggia* overlooking the garden at the back?
- H Private bedchamber of the Cardinal
- J Private closet
- K Called a *camera* in c. 1590; perhaps originally a second antechamber
- L Chapel
- M Separate apartment
- N Saletta associated with M in c. 1590
- P Courtyard

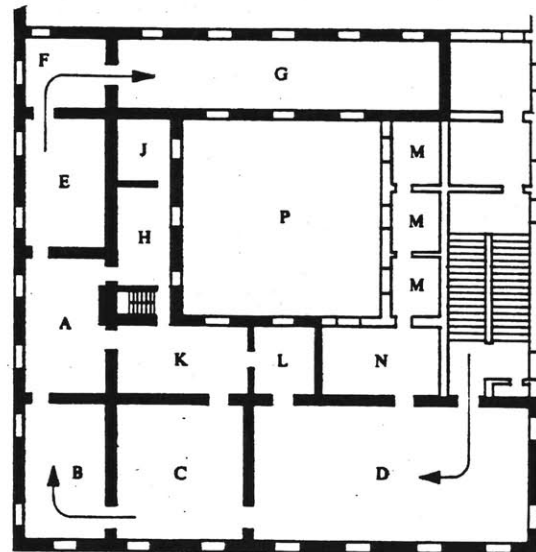
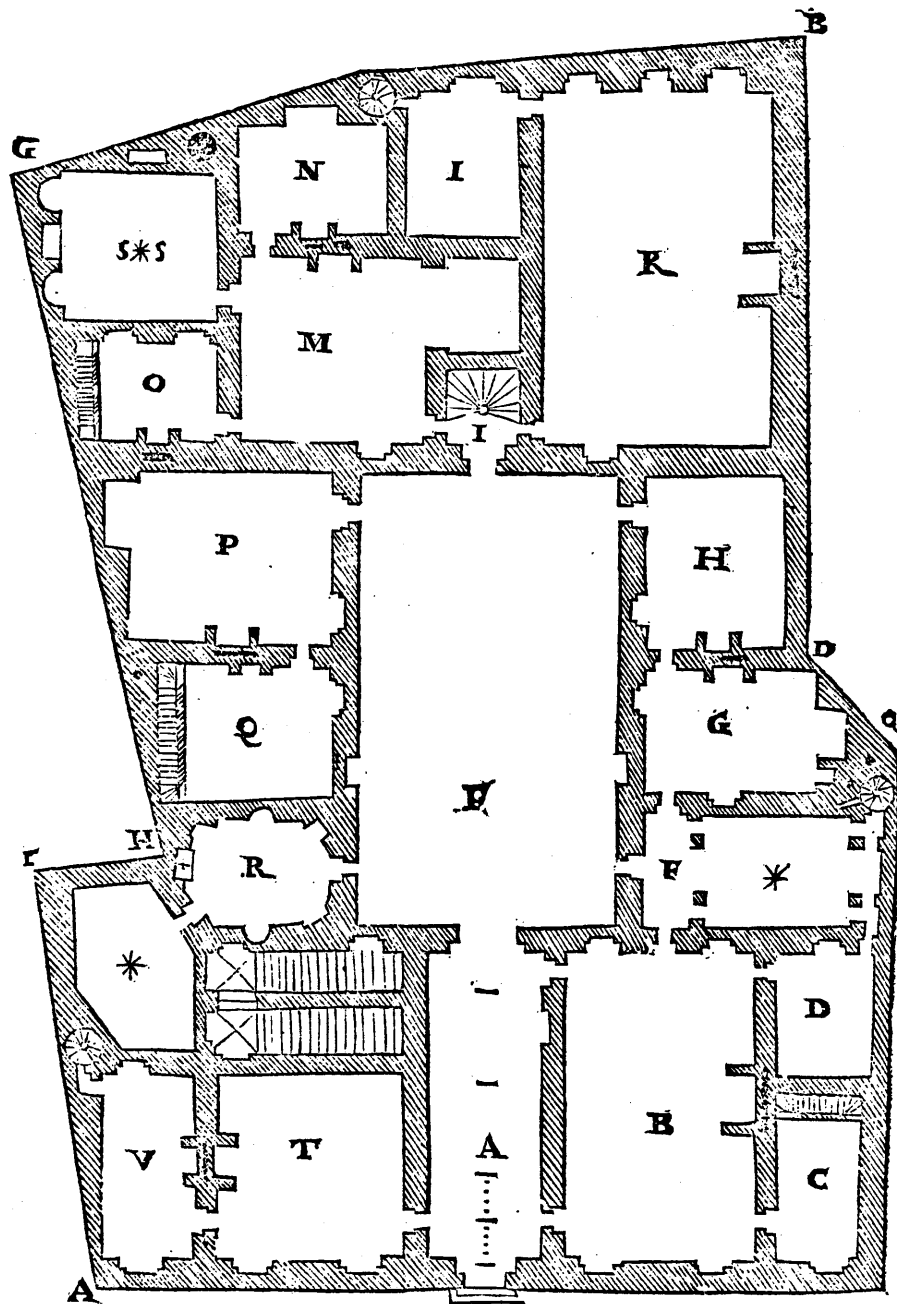


Fig. 4 - Ottaviano Mascarino: plan of piano nobile of Palazzo Castellesi (1590-1600); Roma, Accademia Nazionale di San Lucca, Fondo Mascarino, n. 2414.

Fig. 5 - Palazzo Castellesi: plan scheme of piano nobile (from Thornton)



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Fig. 6 - Serlio: plan for “sito fuori di squadro” (from “Il Settimo Libro”)

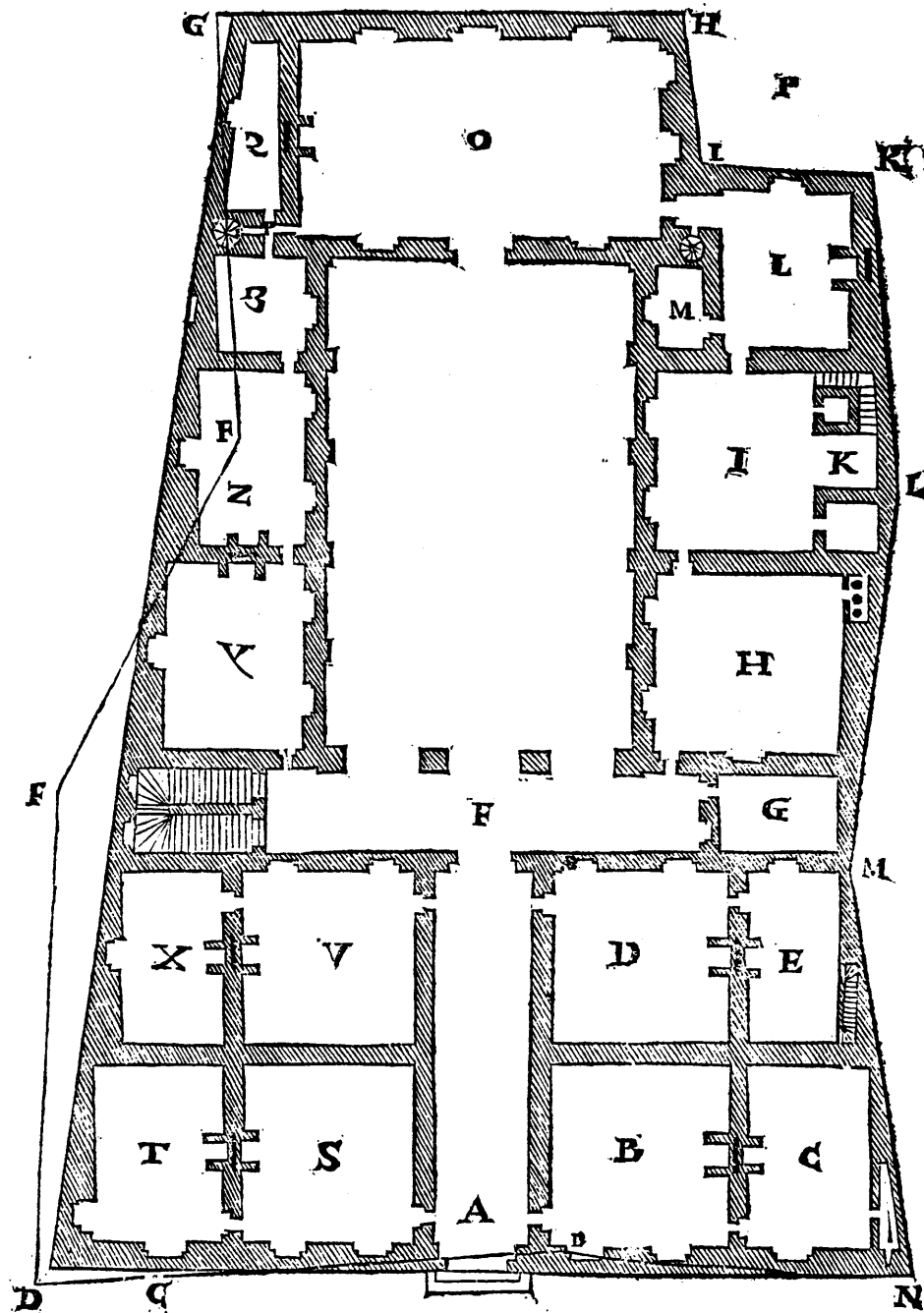


Fig. 7 - Serlio: plan for "sito fuori di squadro" (from "Il Settimo Libro")

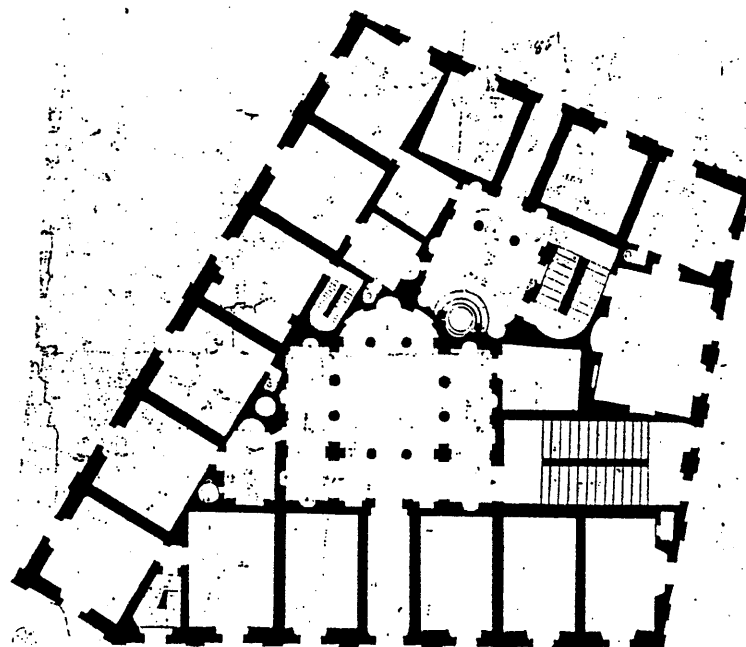
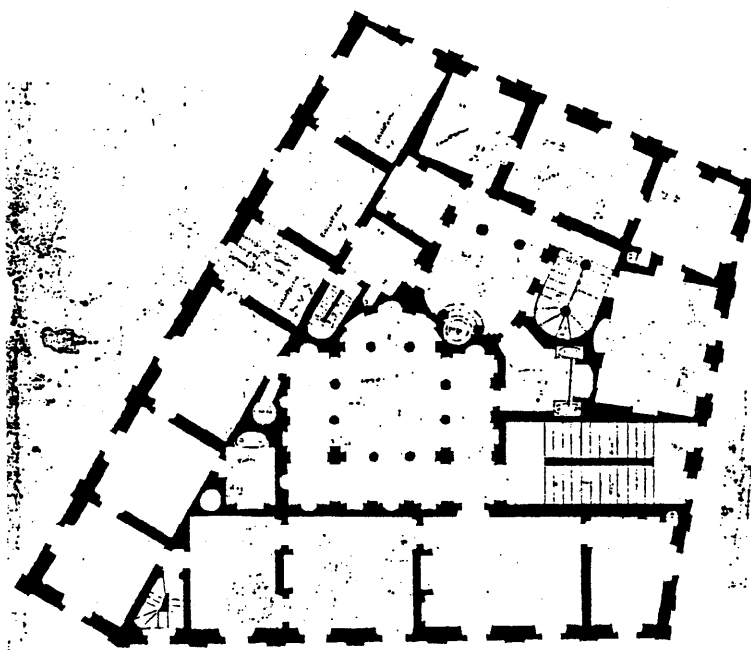


Fig. 8 - Raphael's house on the via Giulia: plans of piano nobile and ground floor  
(author, based on Uffizi 310 A and 311 A)

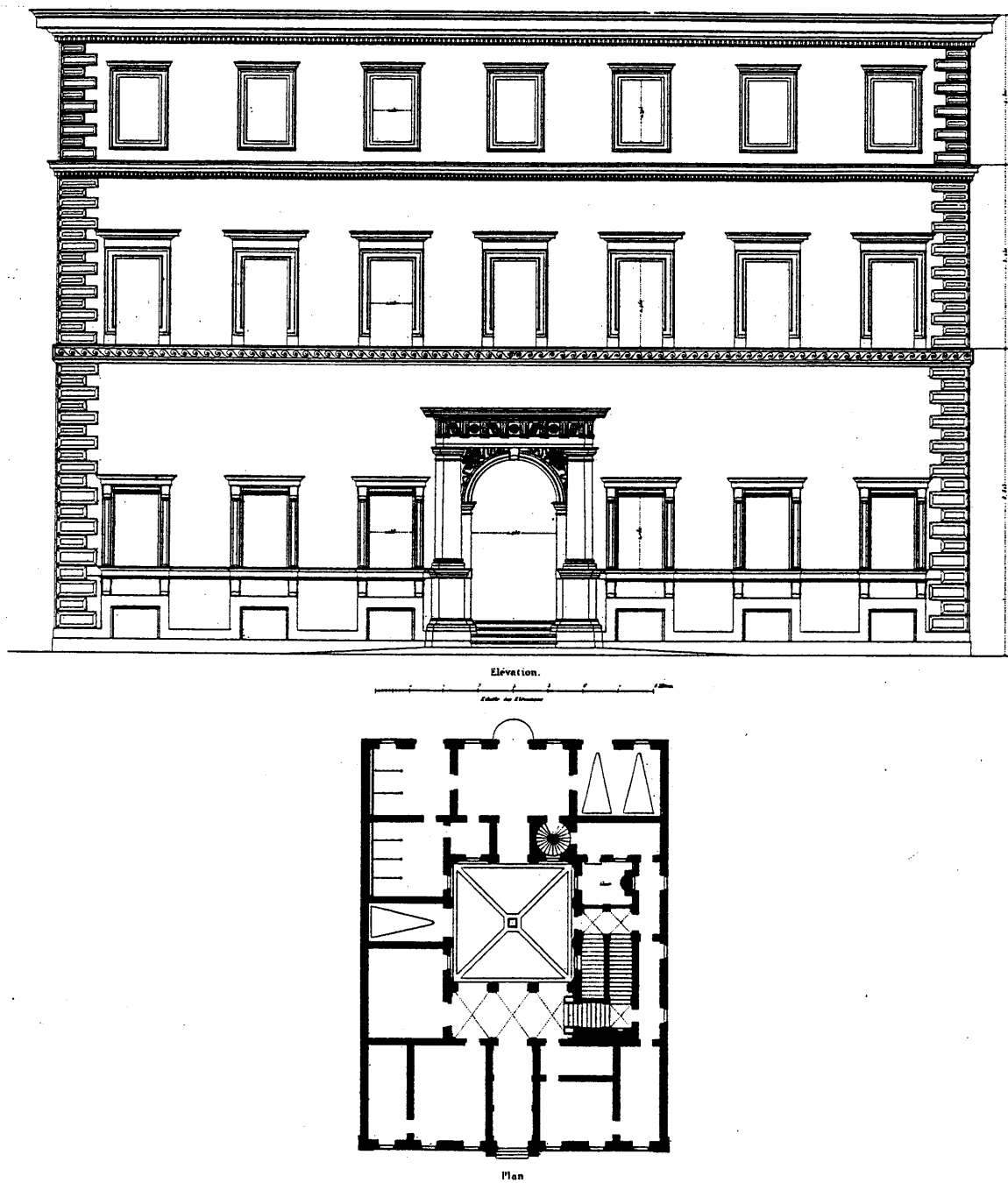


Fig. 9 - Palazzo Baldassini: facade and plan (from Letarouilly)

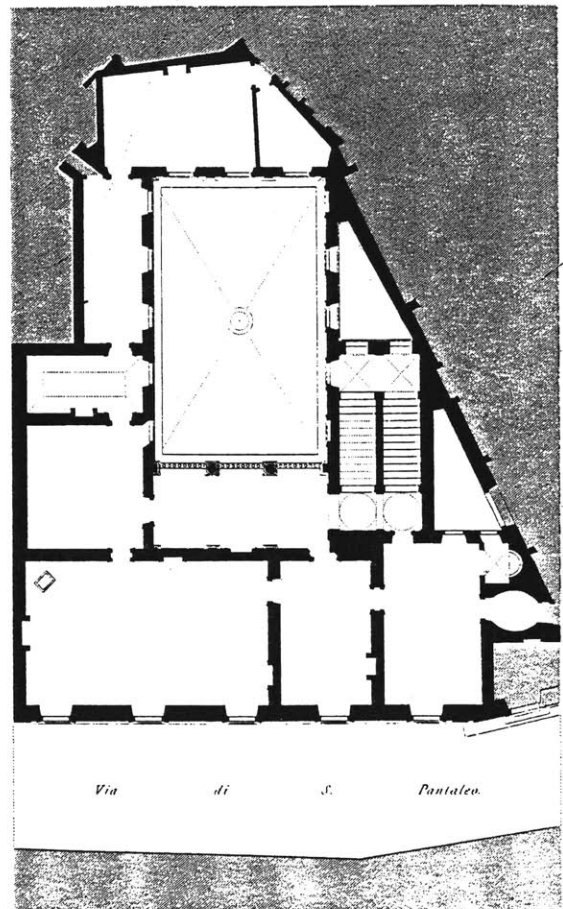
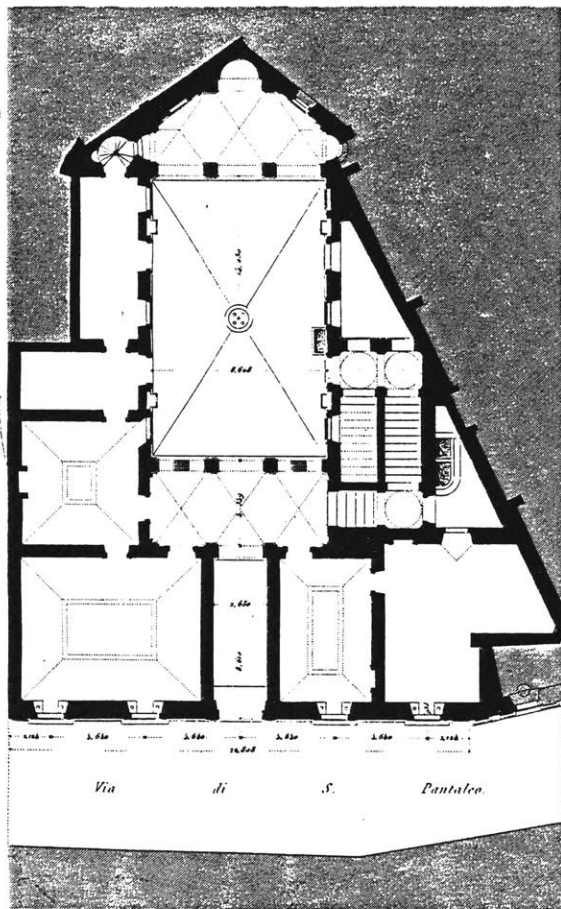


Fig. 10 - Palazzo Angelo Massimo: plans of ground floor and piano nobile (from Letarouilly)

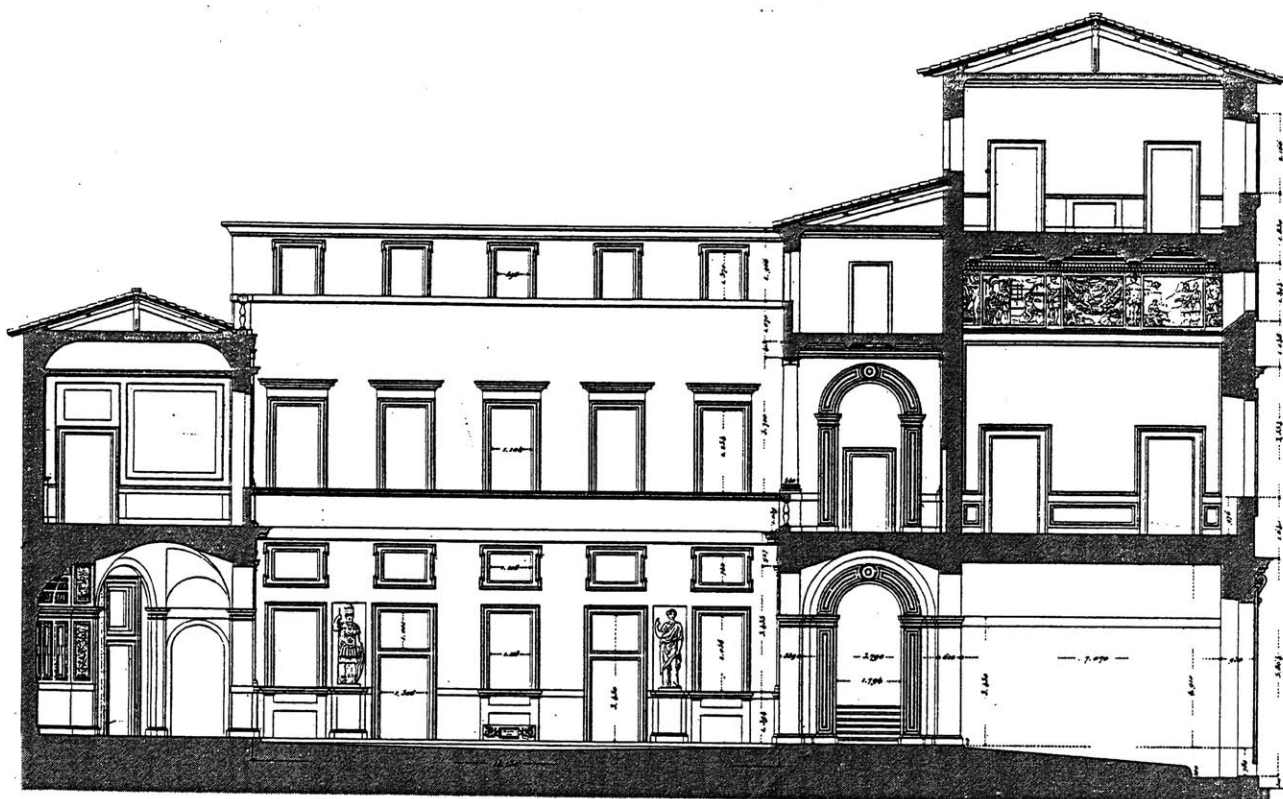
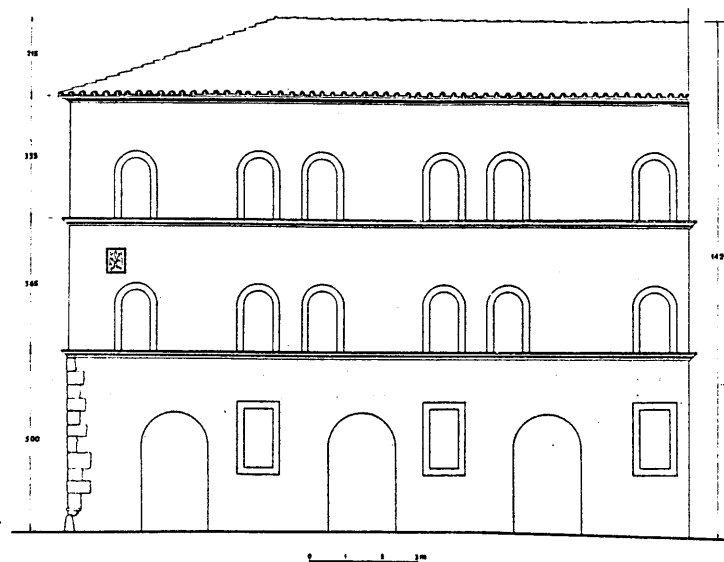
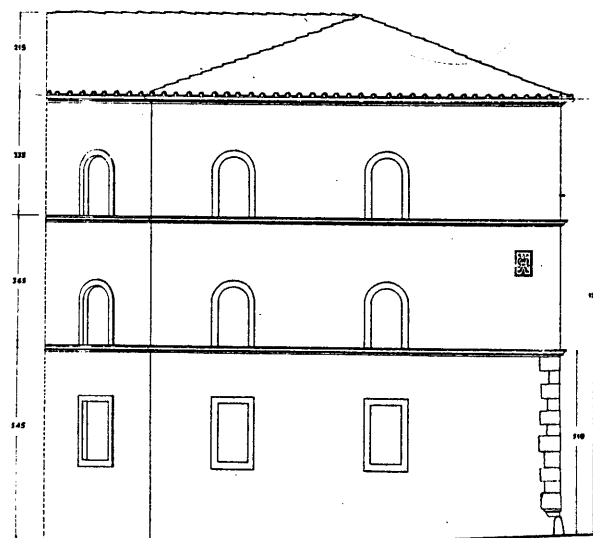


Fig. 11 - Palazzo Angelo Massimo: section (from Letarouilly)





PROSPETTO SU VIA DEL CONSOLATO



PROSPETTO SU VIA GIULIA

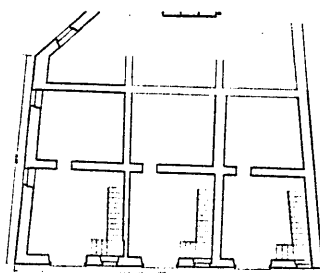


Fig. 12 - Casa "a schiera" on the via del Consolato, Rome (late 15th century; from Appolonj)

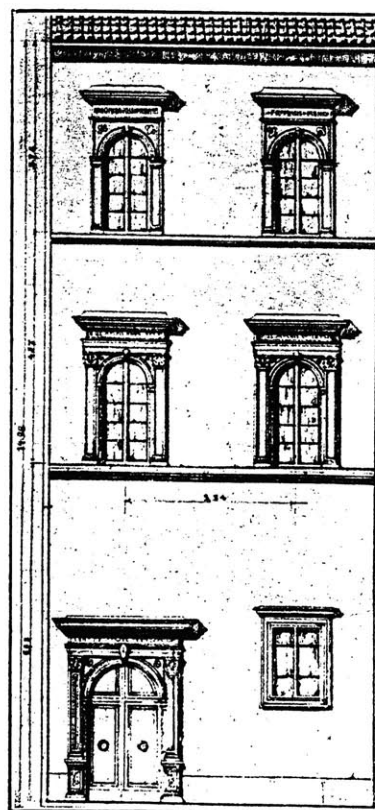
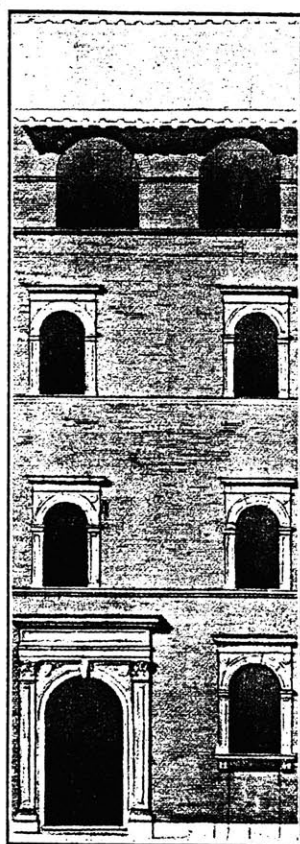


Fig. 13 - Casa Vacca, Rome (late 15th century; from Giovannoni, 1935)

Fig. 14 - Casa Prospero de Mocchi, Rome (early 16th century; from Giovannoni, 1935)

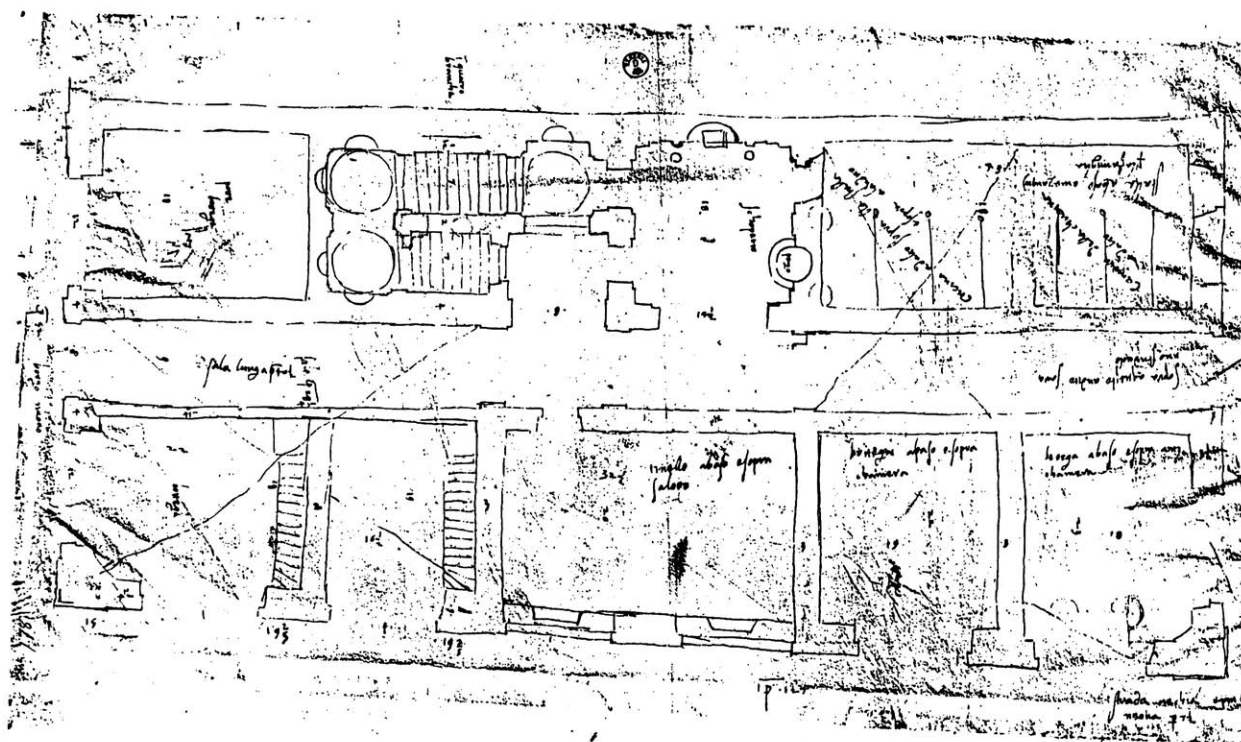


Fig. 15 - Antonio da Sangallo the Younger: plan for Casa Ferrari (Uffizi 1399 A)

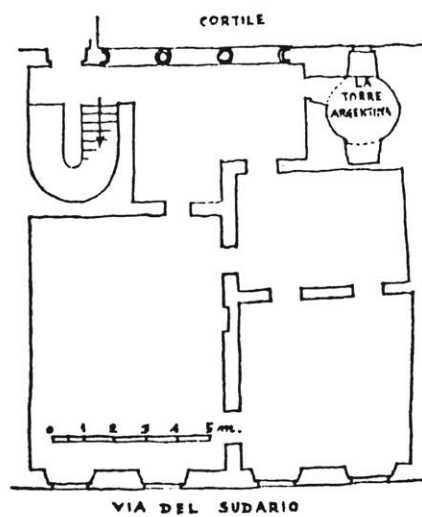
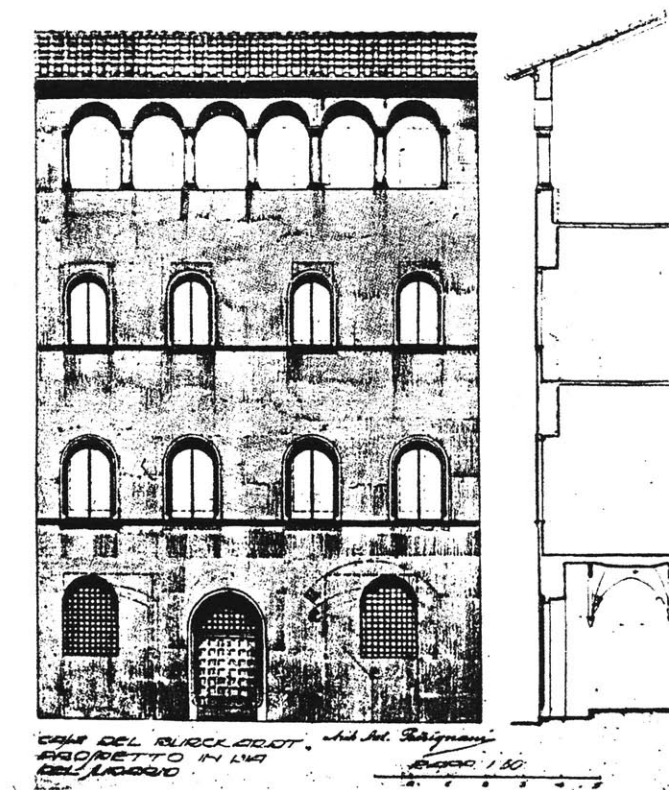
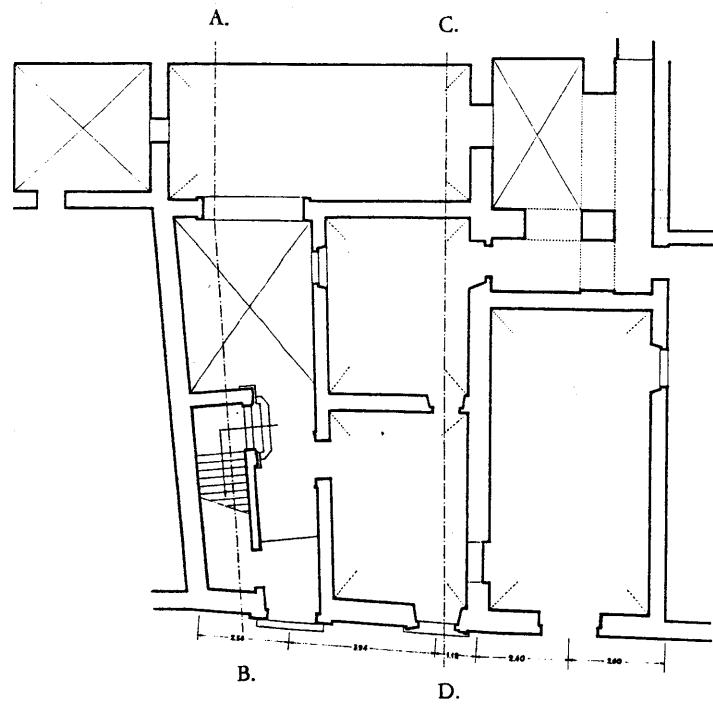
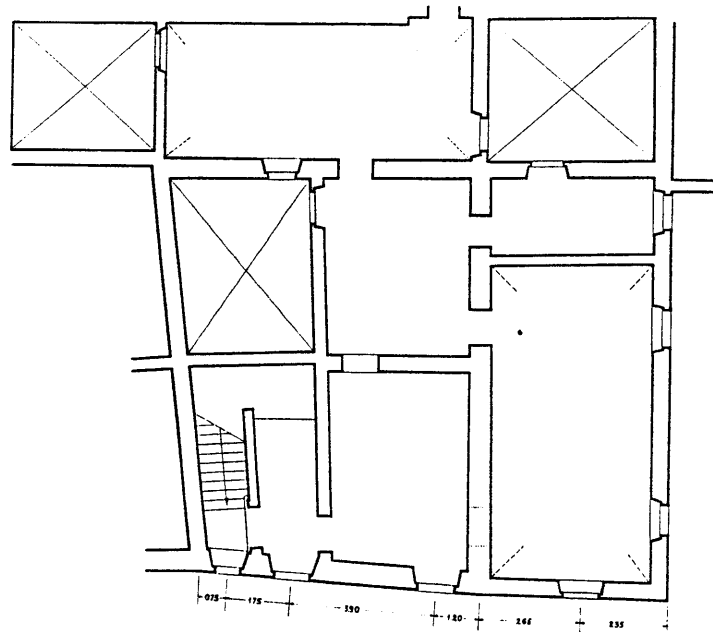


Fig. 16 - Casa del Burcardo, Rome (late 15th century; from Tomei)



PIANTA DEL PIANOTERRENO

0 1 2 3 m.



PIANTA DEL PRIMO PIANO

Fig. 17 - Casa on the via del Consolato, Rome (late 15th century; from Appolonj)

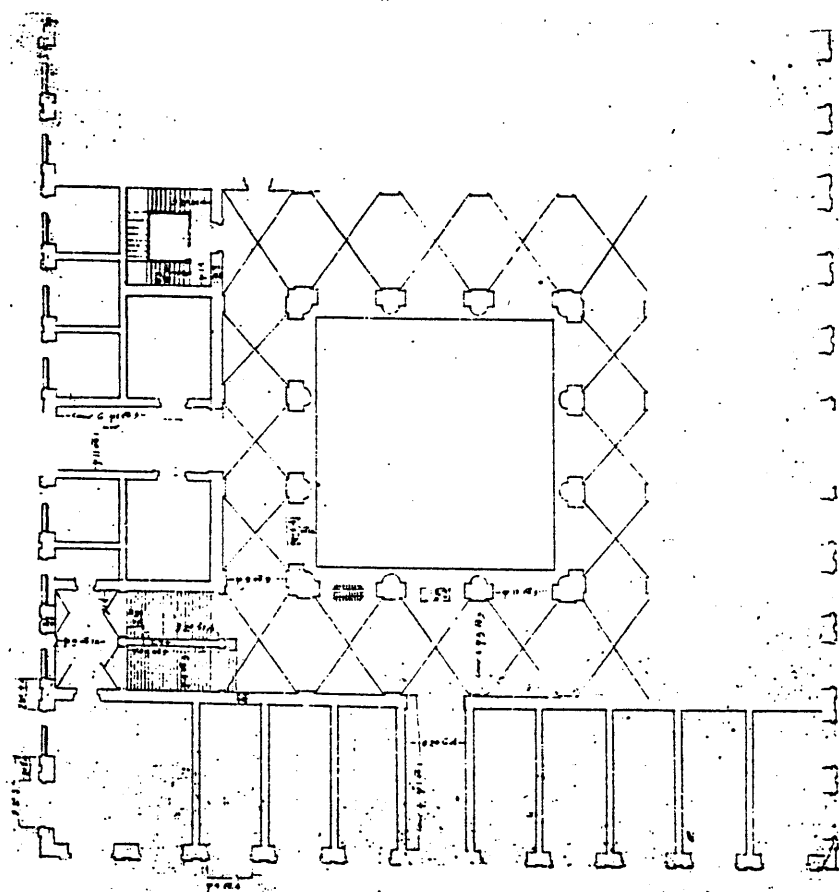


Fig. 18 - Plan for the Palazzo Pichi (Munich: Staatsbibliothek, cod. ic. 195, f. 13)

# FODI DI CASE DI MERCANTI.

**Casa di  
Mercanti.** I mercanti più utili: excepto che li predetti diano hanno: ila habi-  
tatione loro: una stanza bella: a ornata: più mercanti ipso: chon  
banco delle: chon: et: habet: quanto: una: stanza: opia: di: fono: p. fondato:  
ho: uno: magnifico: fono: la: sua: mercantia: in: chon: polli: fono: et: cont:  
rectore: La: quali: stanza: uno: libere: et: expedita: dalle: altre: della: stanza:  
pla: carona: dispo: ridonata: et: habet: questo: debbono: hanno: adotti:  
una: habitatione: ho: più: più: fono: da: stanza: p. et: ad: ali: et: non:  
fono: stanza: di: più: mercanti: habet: et: benivolentia: la: quali: habitatione:  
final: mente: delle: altre: stanza: ha: separata: et: libere: Doppo: questo: dui-  
no: uno: anchor: fono: p. ramente: ample: chon: et: habet: p. di:  
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Nobili.** N. alcuna: parte: della: Casa: p. et: dui: dui: della: chon: de: no:  
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palaz: dui: hanno: uno: fono: chon: fono: fono: di: quello: inter:  
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**Sollilo  
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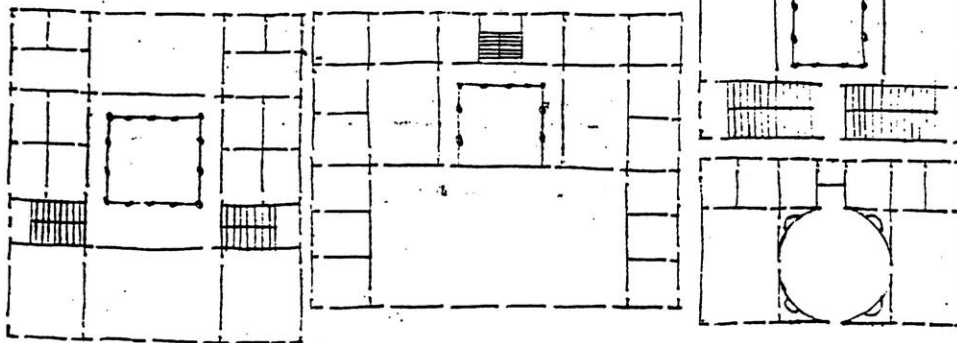


Fig. 19 - Francesco di Giorgio Martini: page of "Trattato" (from Martini)

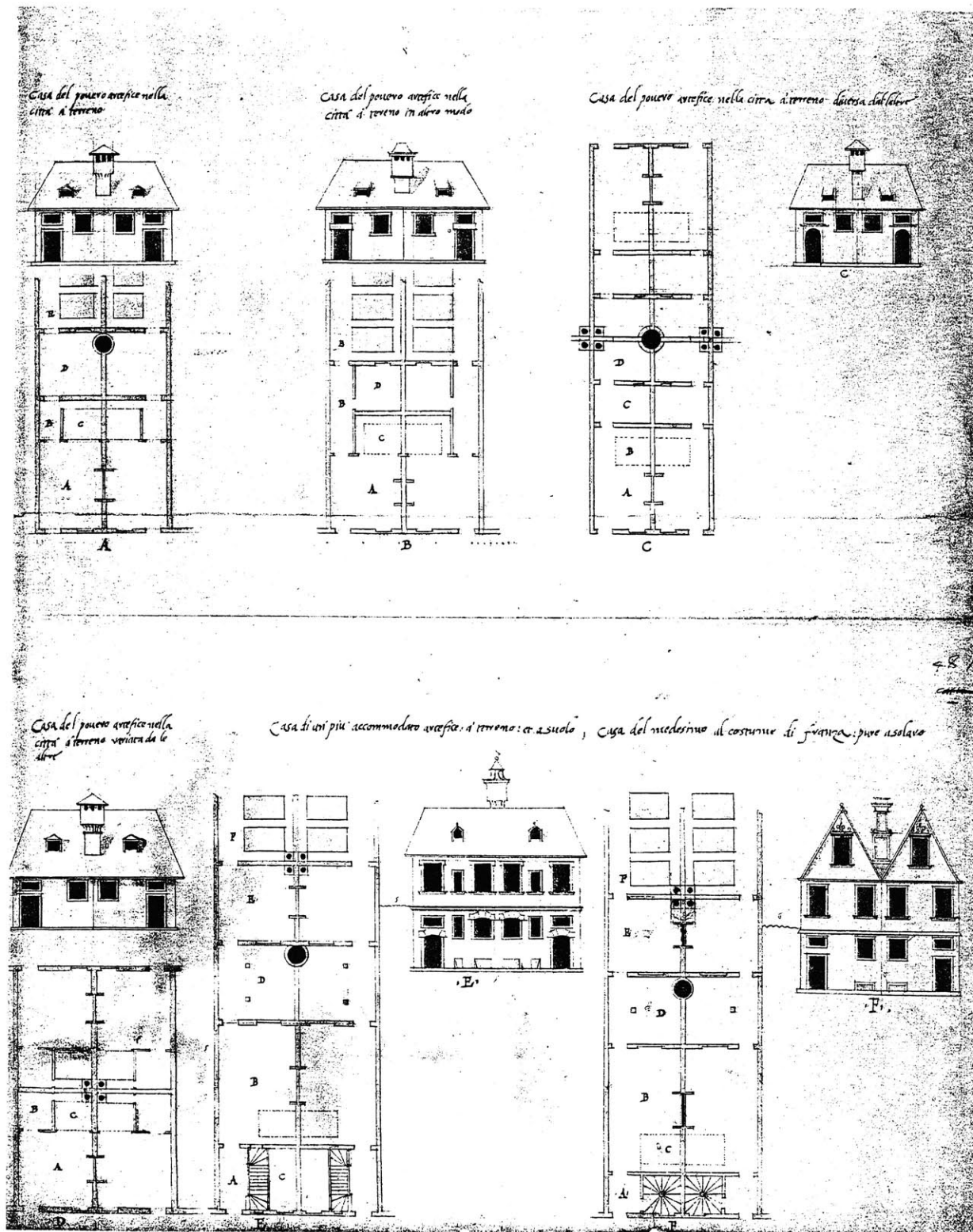


Fig. 20 - Serlio: houses A to F (from the Avery manuscript of the "Sesto Libro")



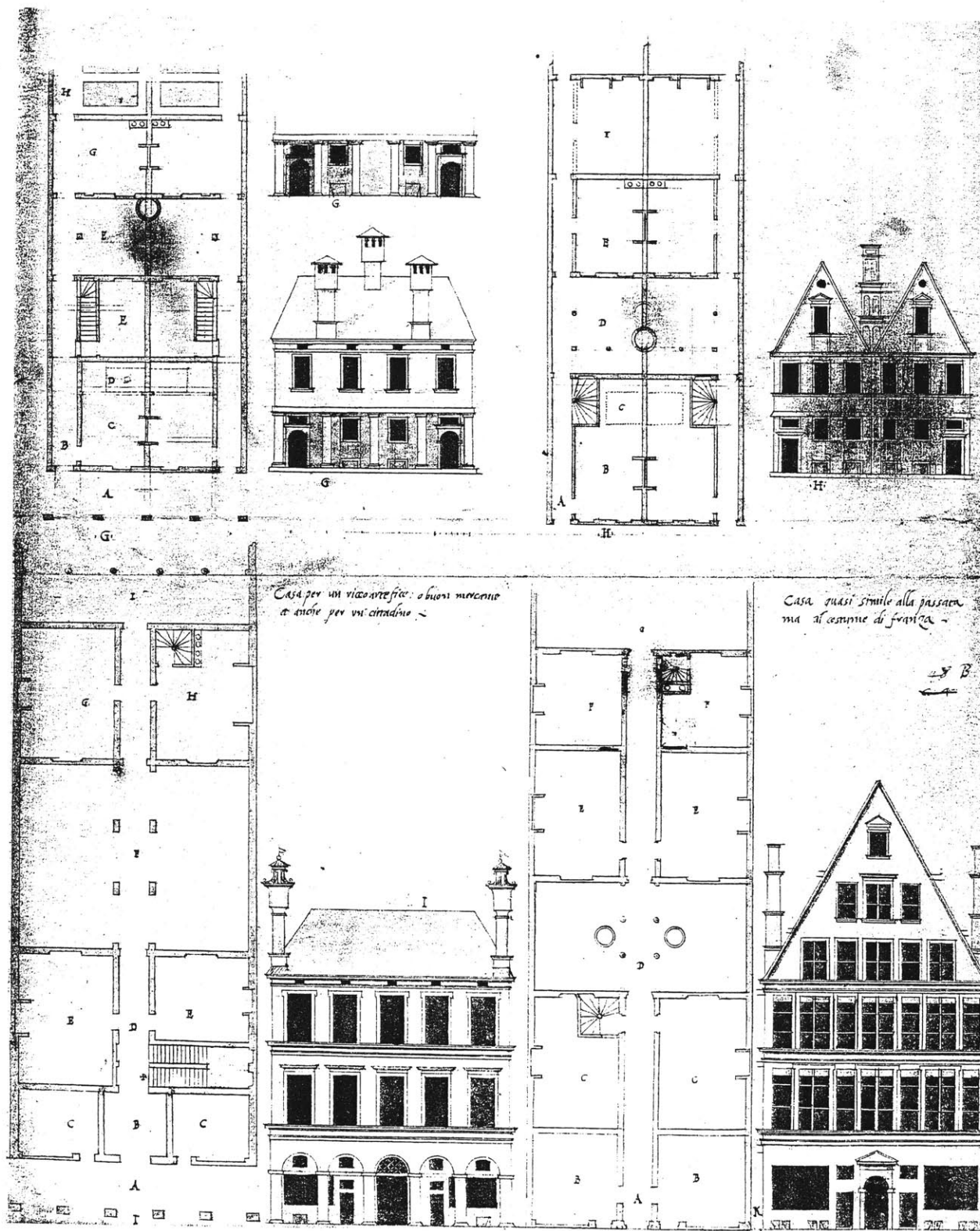


Fig. 21 - Serlio: houses G to K (from the Avery manuscript of the "Sesto Libro")

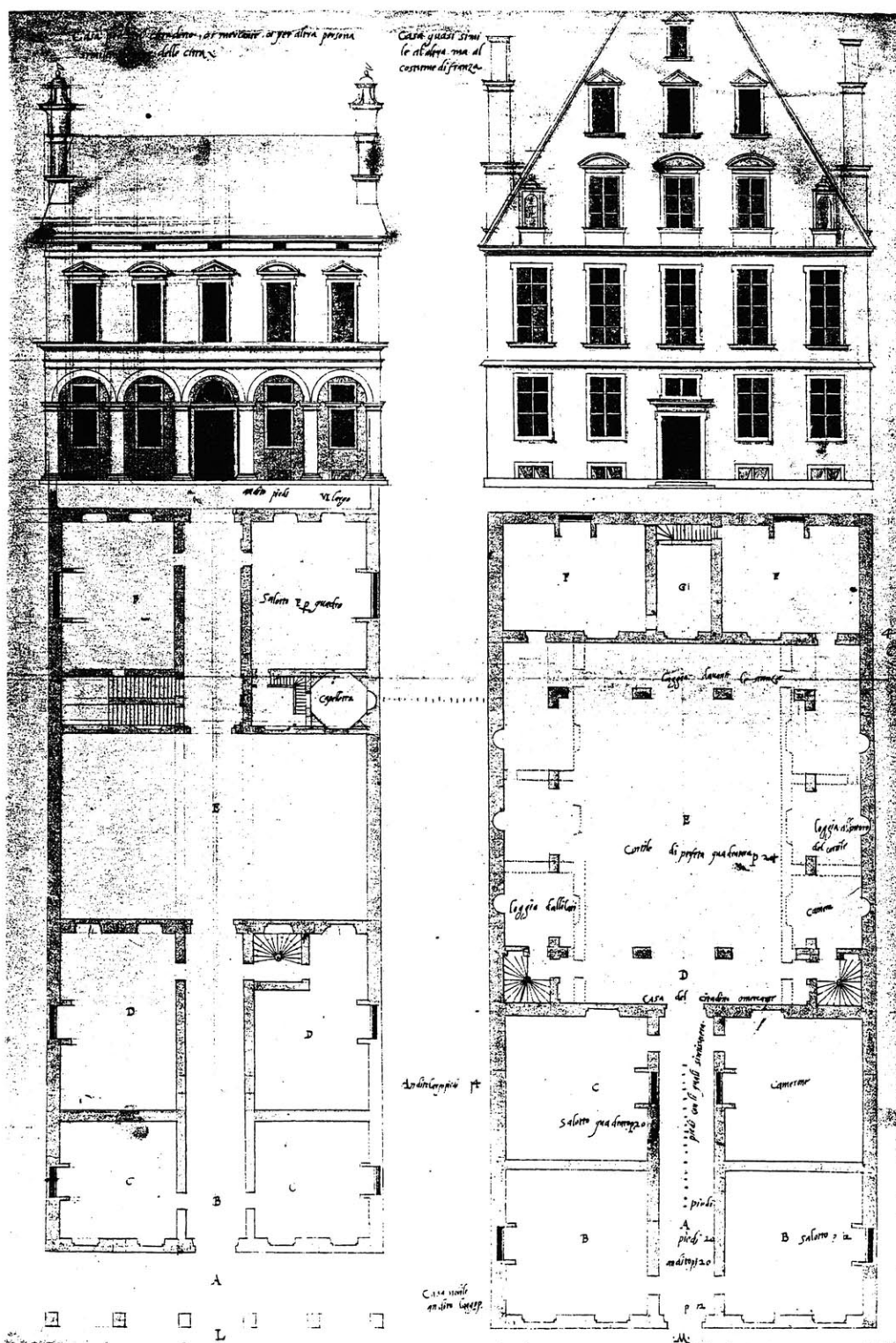


Fig. 22 - Serlio: houses L and M (from the Avery manuscript of the “Sesto Libro”)

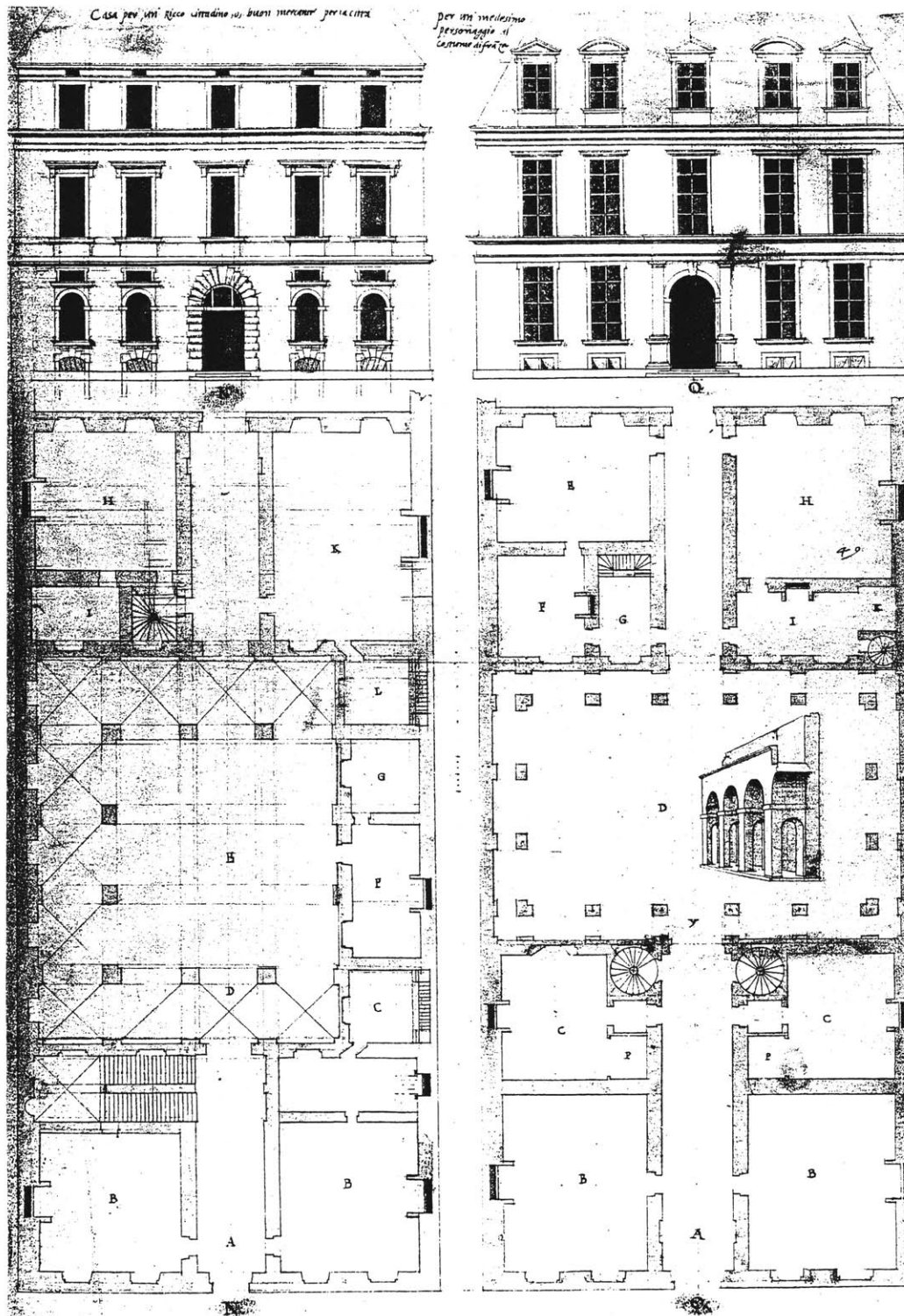


Fig. 23 - Serlio: houses N and O (from the Avery manuscript of the "Sesto Libro")

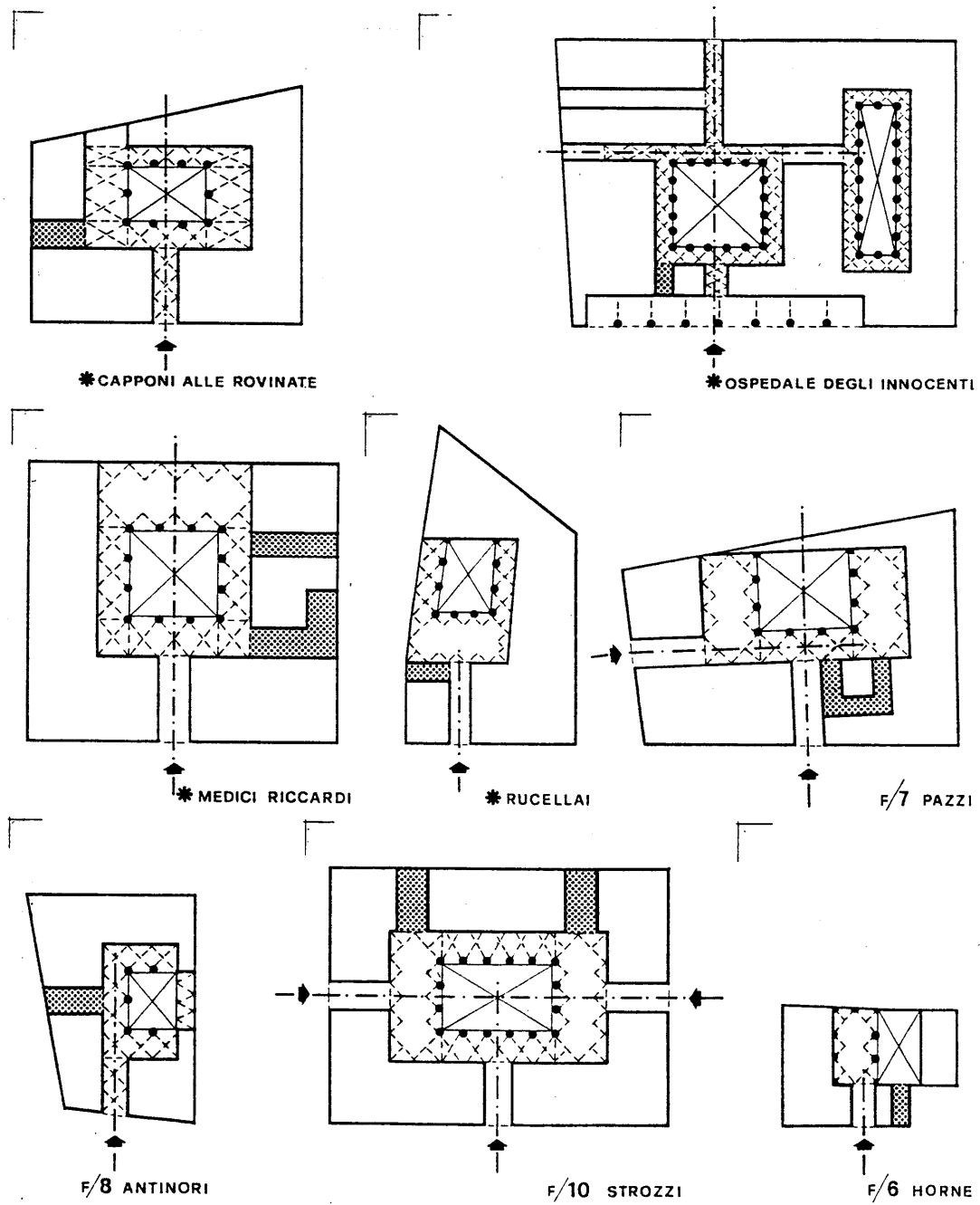


Fig. 24 - Plan schemes of Florentine palaces (from Mandelli)

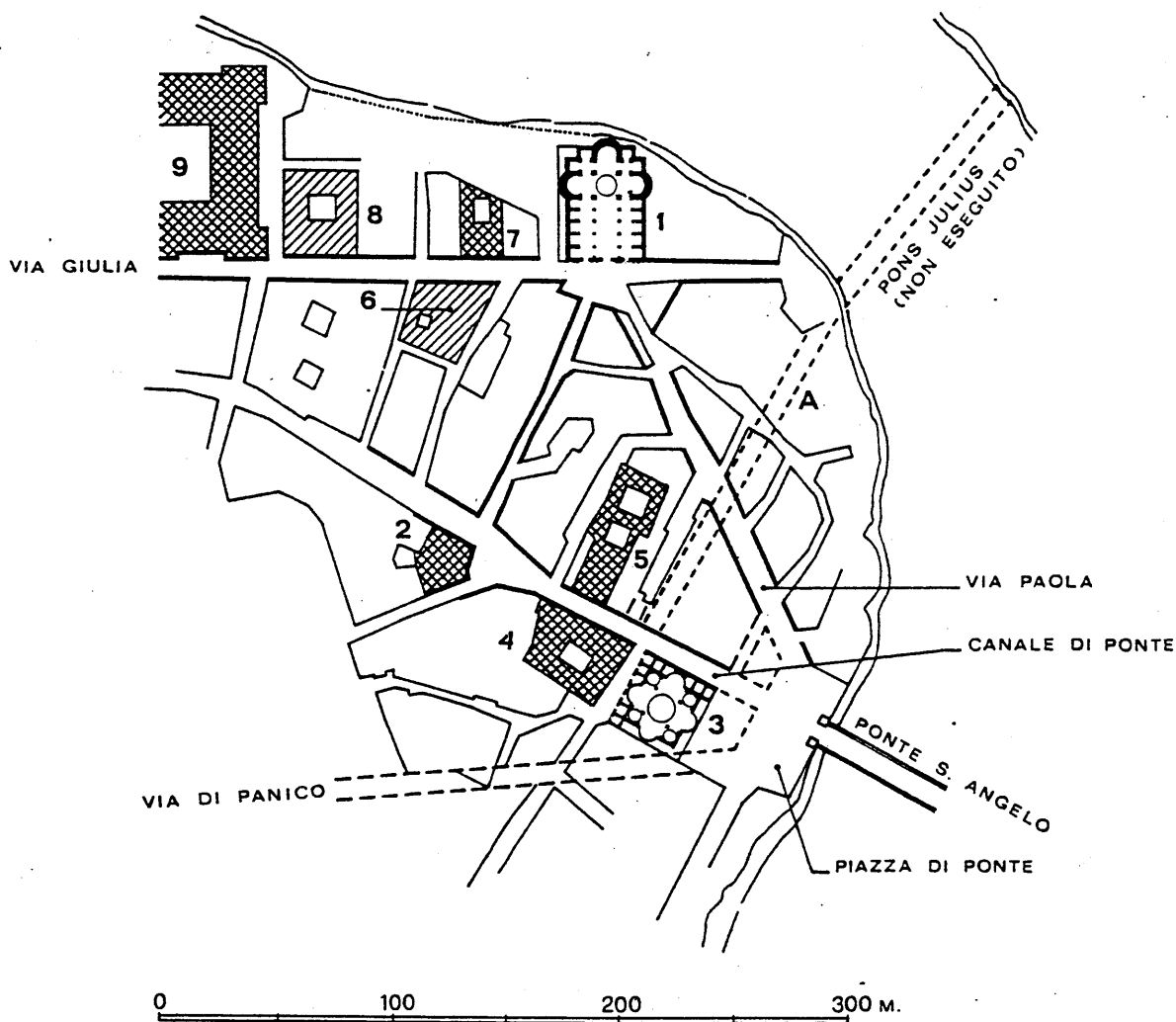


Fig. 25 - Plan of the area around the church of S. Giovanni dei Fiorentini c. 1520, Rome with location of buildings: 1-S. Giovanni dei Fiorentini; 2-Zecca; 3-SS. Celso e Giuliano (Bramante); 4-Pal. Alberini; 5-Pal. Gaddi; 6-Casa di Raffaello; 7-Casa Sangallo; 8-Palazzo Sangallo (later Sacchetti); 9-Pal. dei Tribunali (Bramante); (drawing by M. dalle Mule, in Spagnesi)

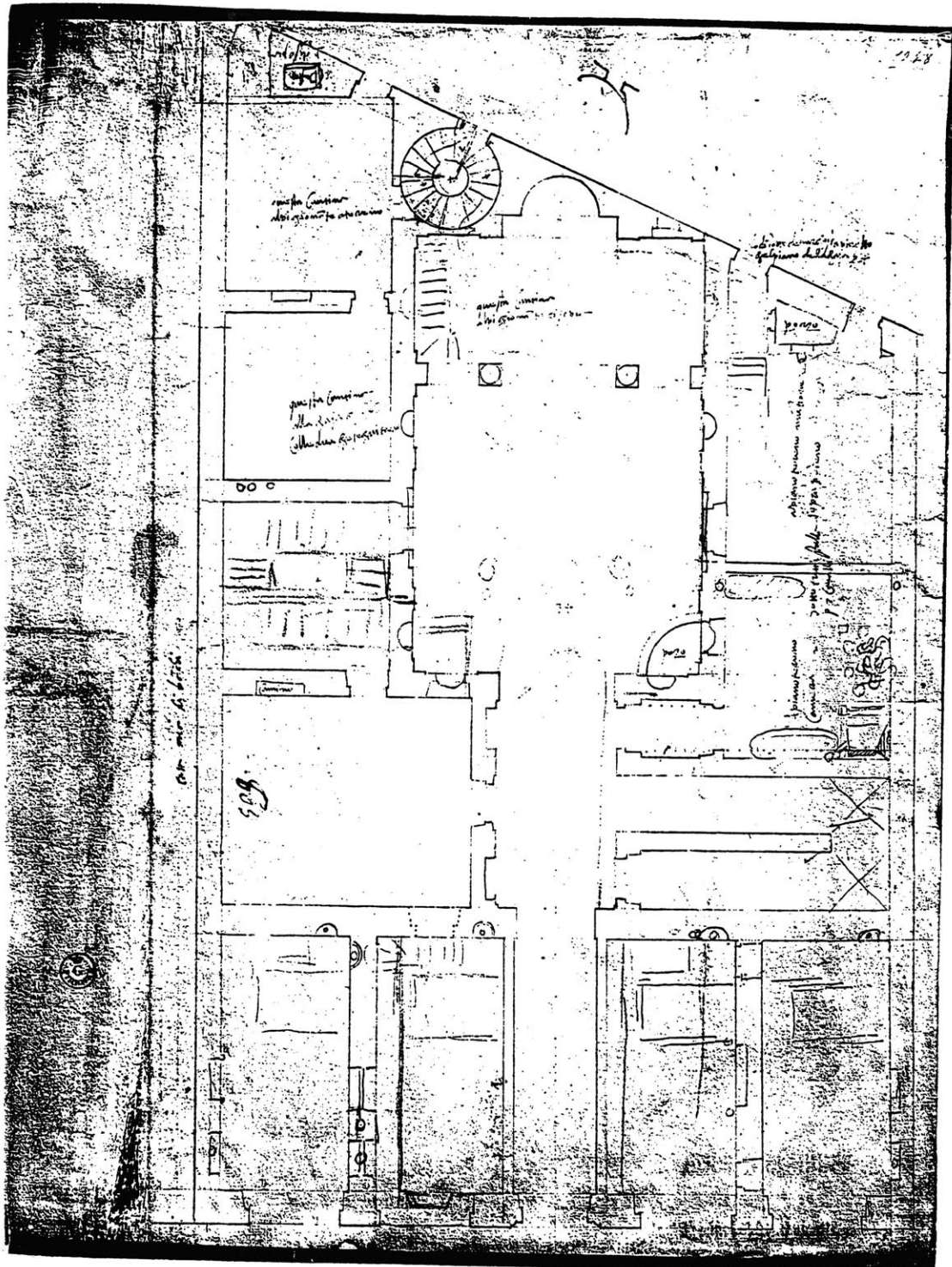


Fig. 26 - Antonio da Sangallo the Younger: plan for house on the via Giulia (Uffizi 1315 A)



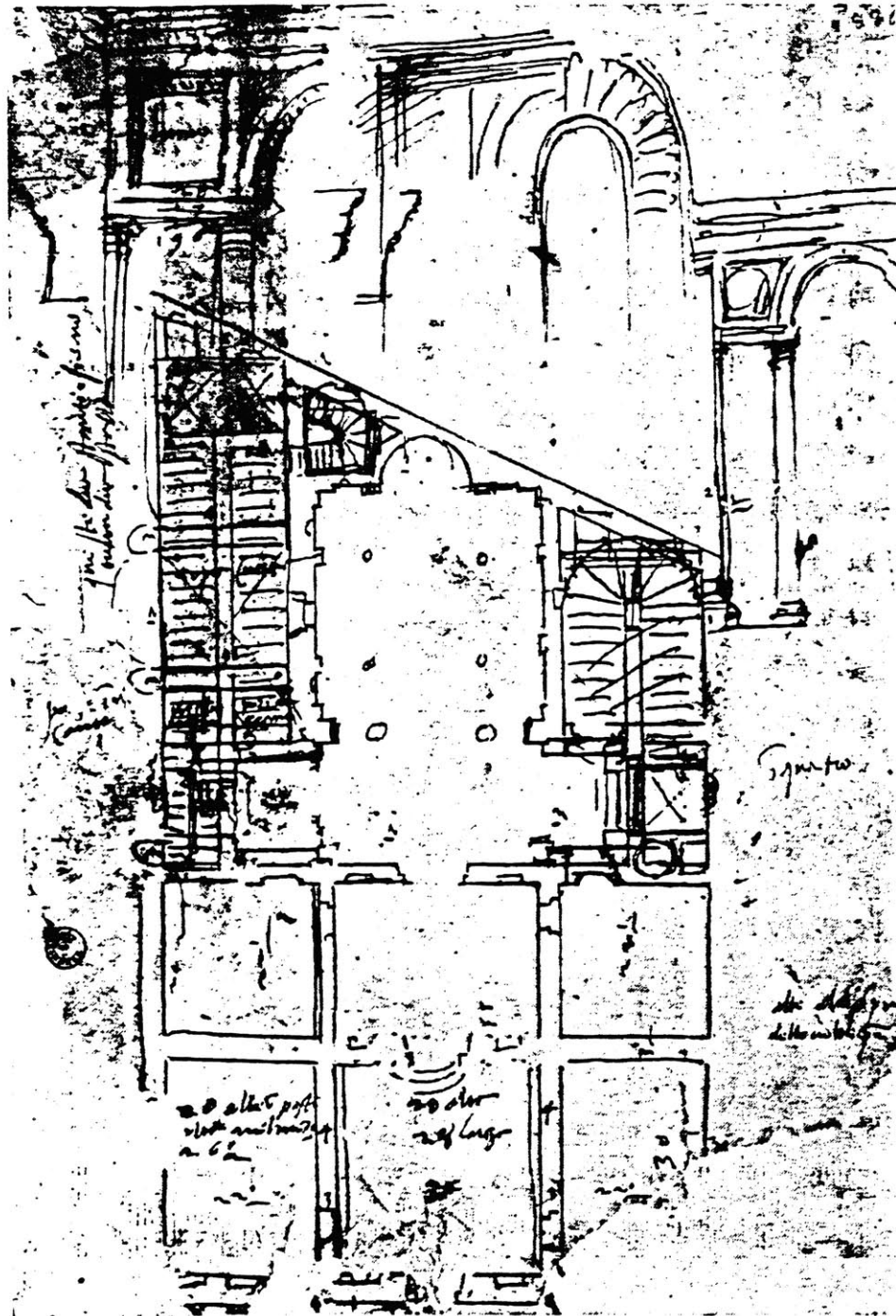


Fig. 27 - Antonio da Sangallo the Younger: plan for house on the via Giulia (Uffizi 1092 A)

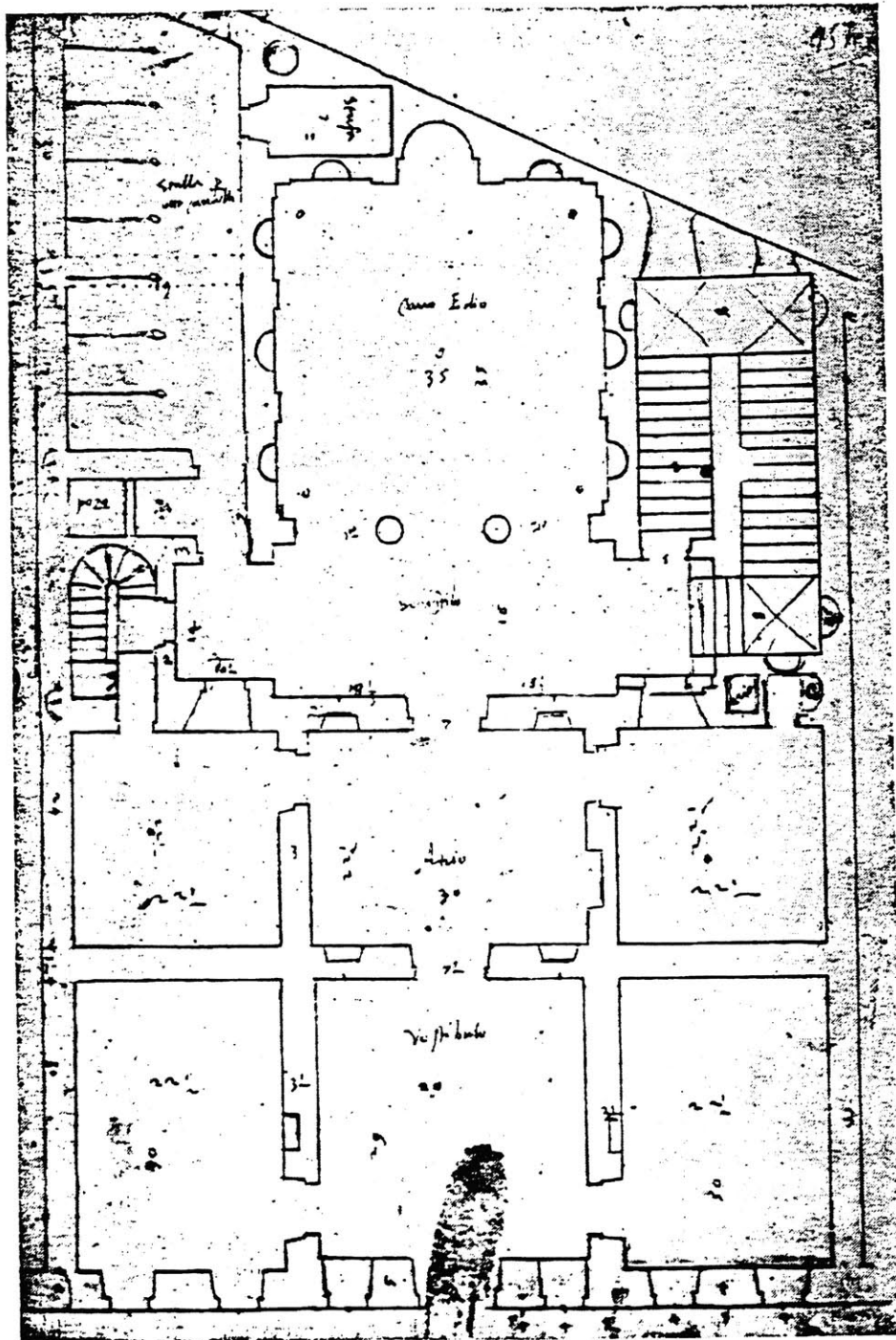


Fig. 28 - Antonio da Sangallo the Younger: plan for house on the via Giulia (Uffizi 1224 A)



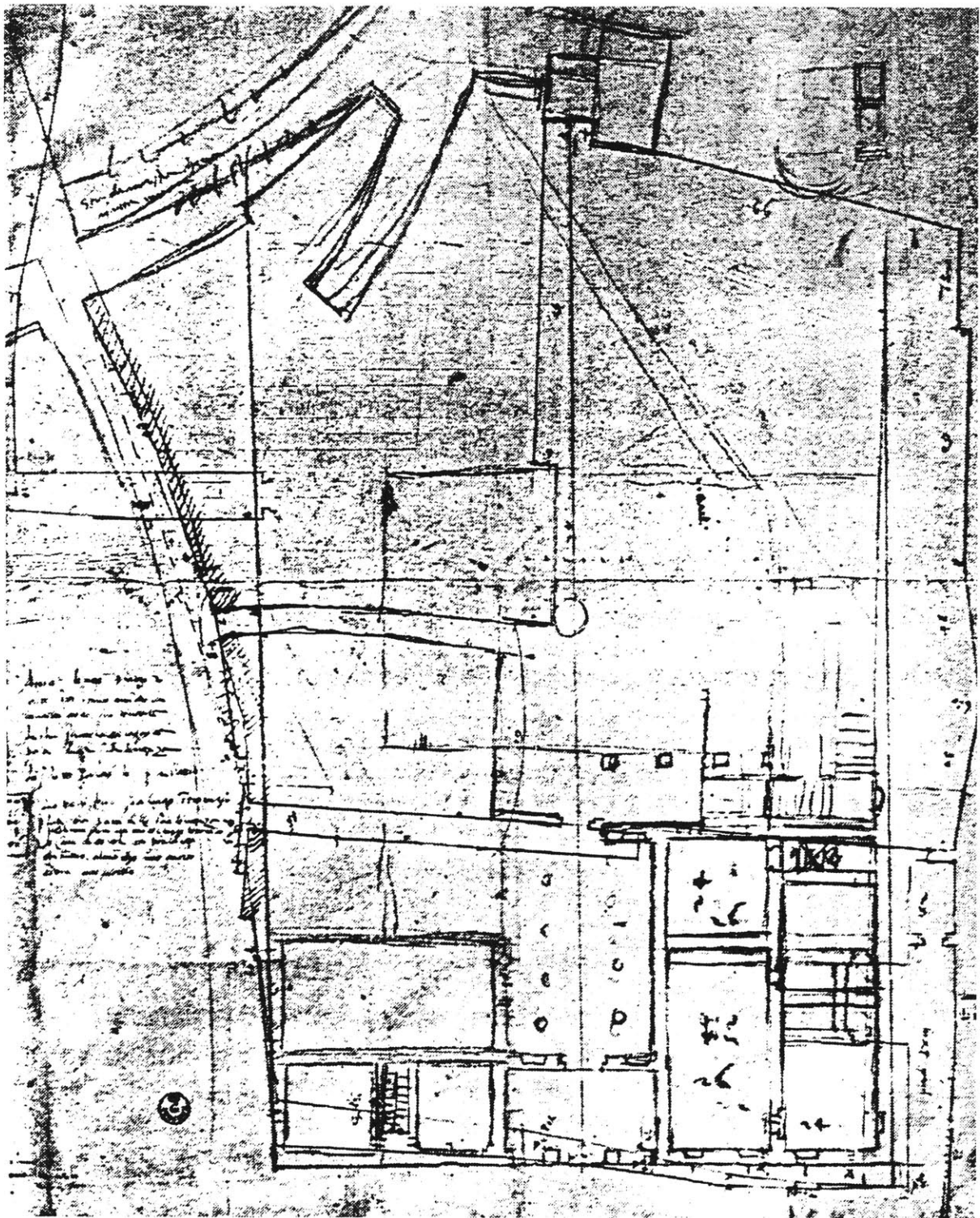


Fig. 29 - Antonio da Sangallo the Younger: study plan for the Palazzo Pucci in Orvieto (Uffizi 968 A)

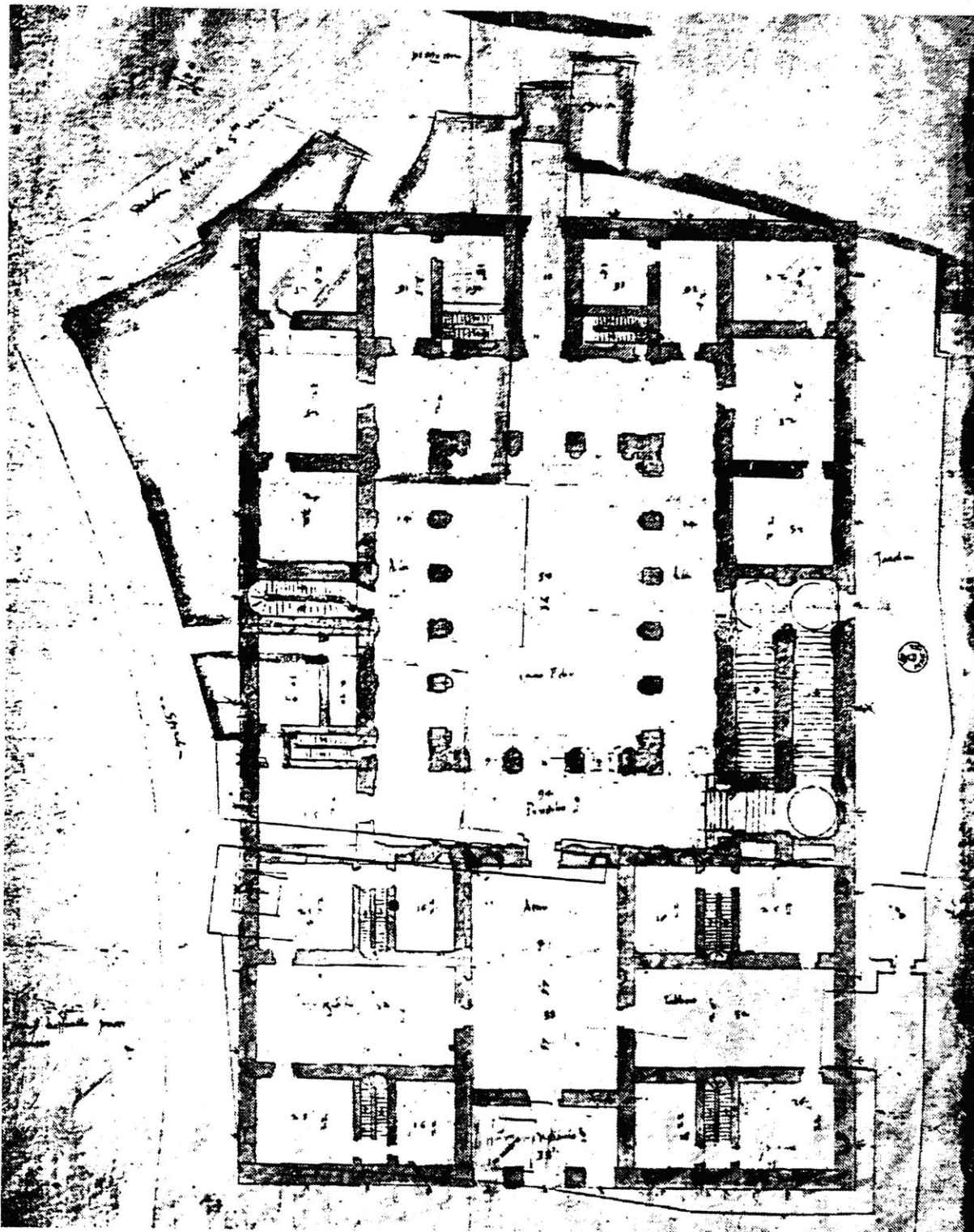


Fig. 30 - Antonio da Sangallo the Younger: plan for the Palazzo Pucci in Orvieto (Uffizi 969 A)

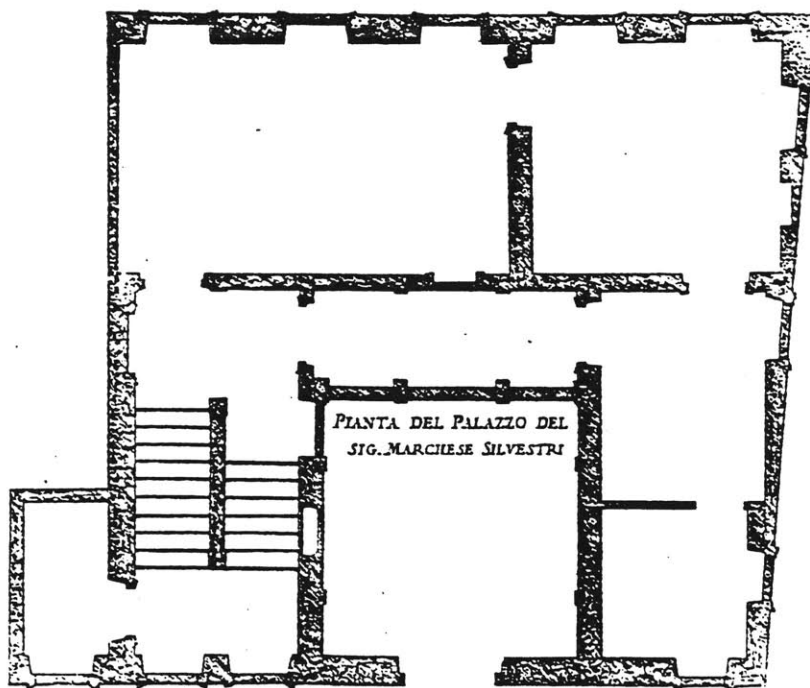
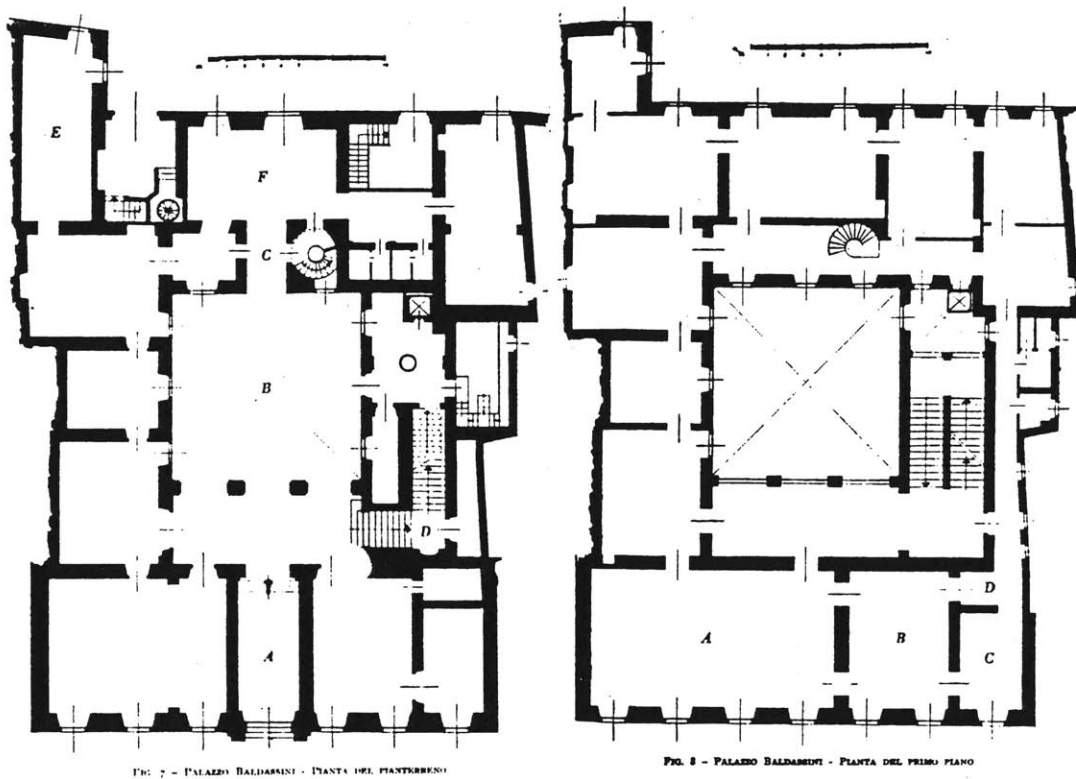


Fig. 31 - Palazzo Baldassini: plans of ground floor and piano nobile (from Redig de Campos)

Fig. 32 - Palazzo Leroy: piano nobile plan (from Ferrerio and Falda)

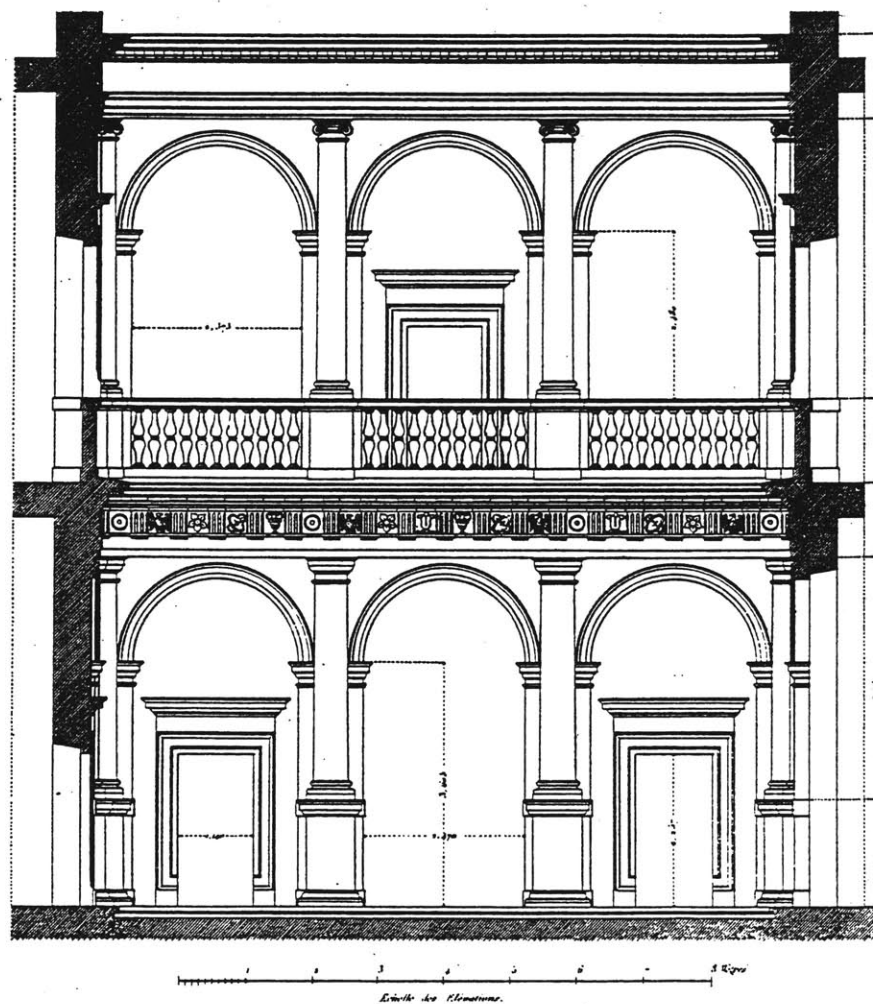


Fig. 33 - Palazzo Baldassini: courtyard loggia (from Letarouilly)

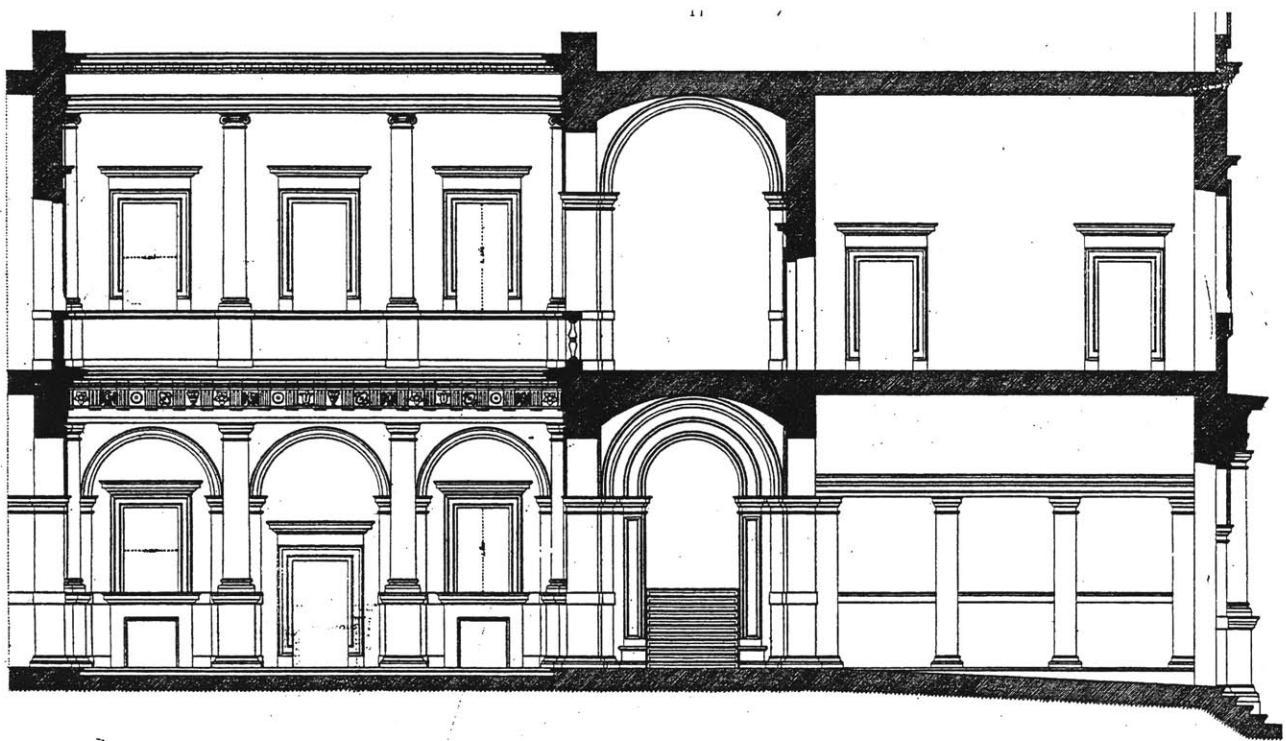


Fig. 34 - Palazzo Baldassini: section (from Letarouilly)



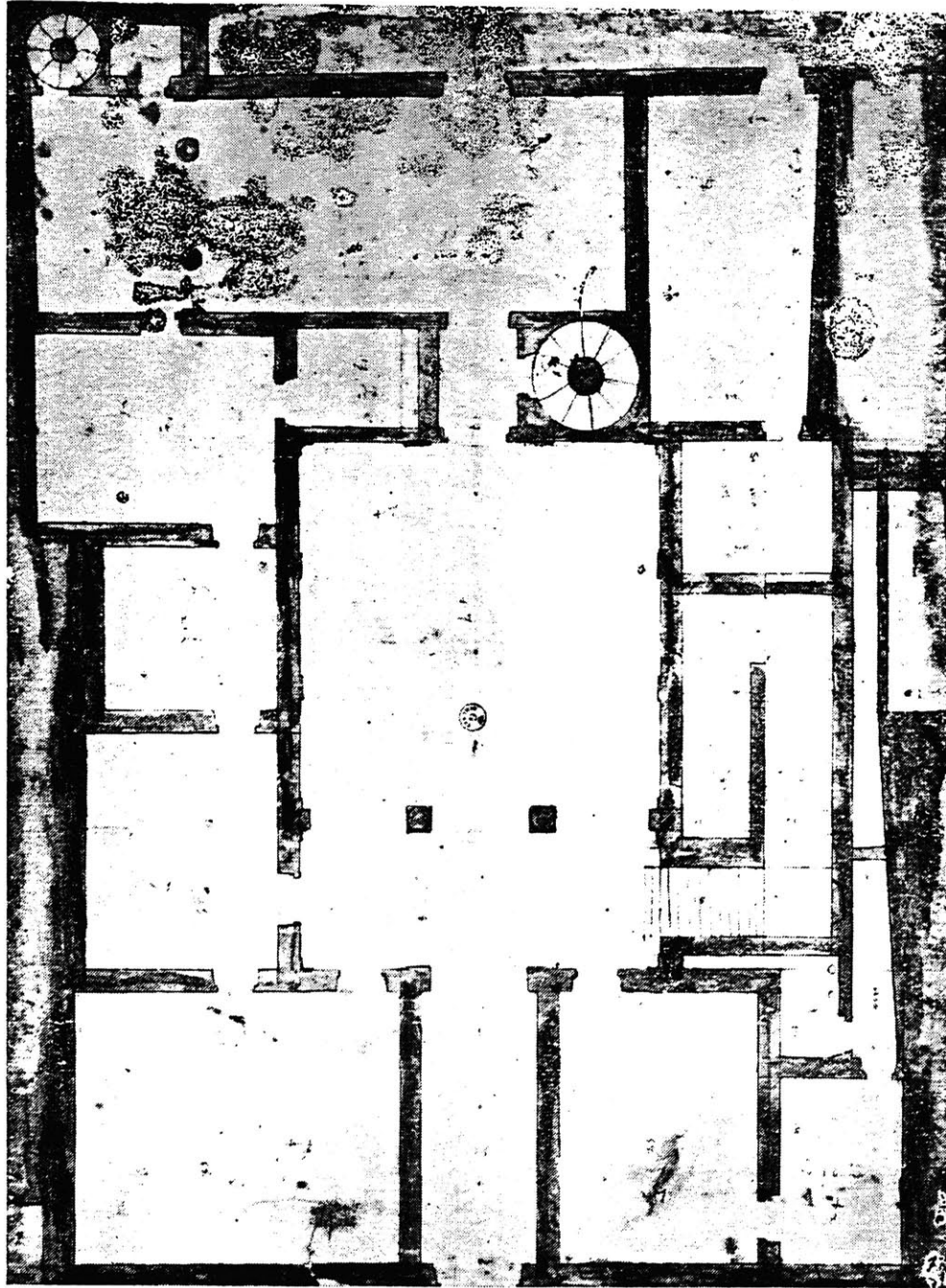


Fig. 35 - Antonio da Sangallo the Younger: plan for Palazzo Baldassini (Uffizi 1298 A)

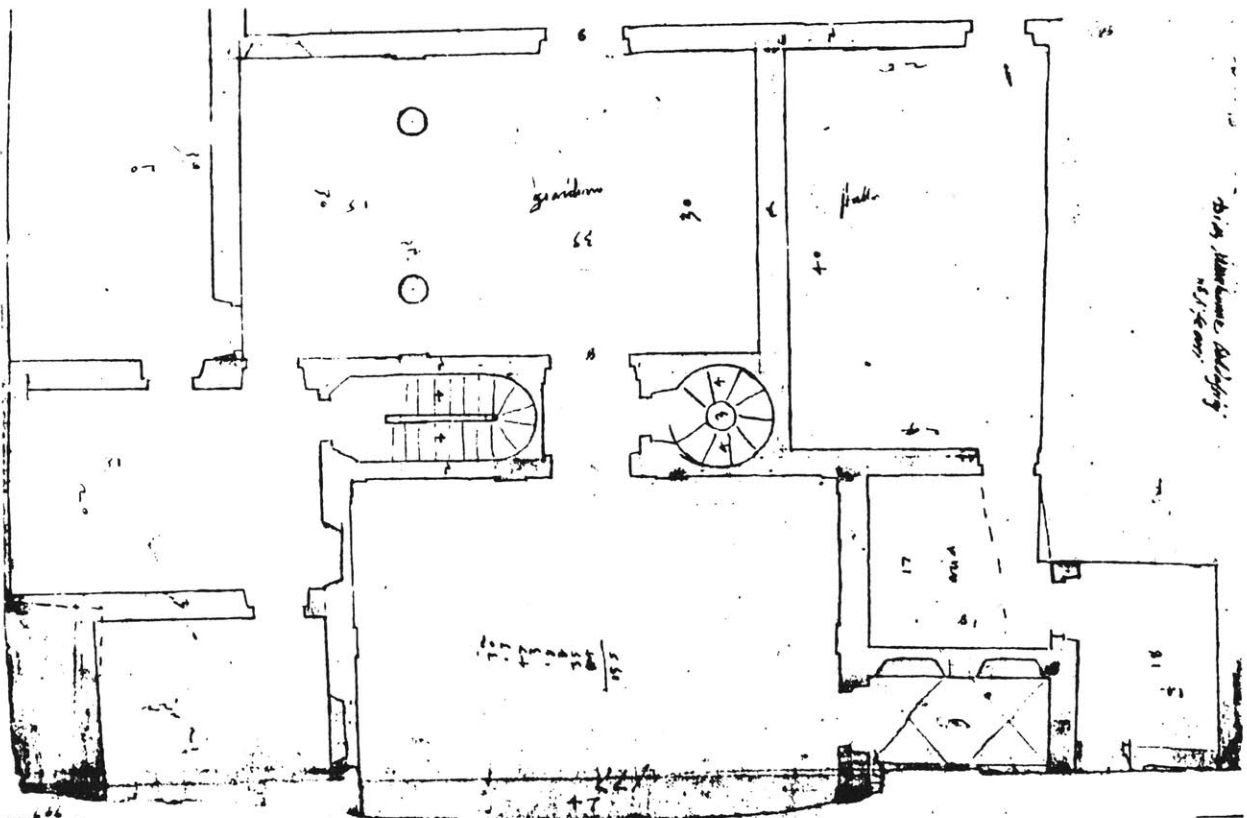


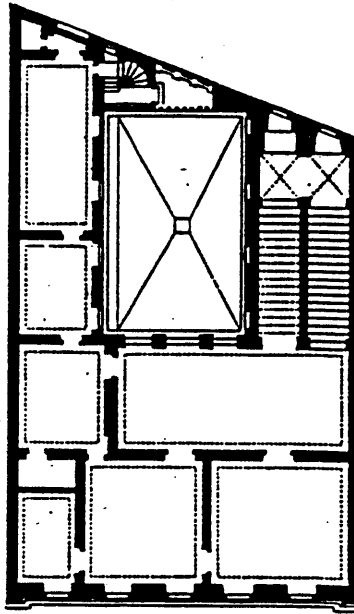
Fig. 36 - Francesco da Sangallo: study for rear part of Palazzo Baldassini (Uffizi 995 A)



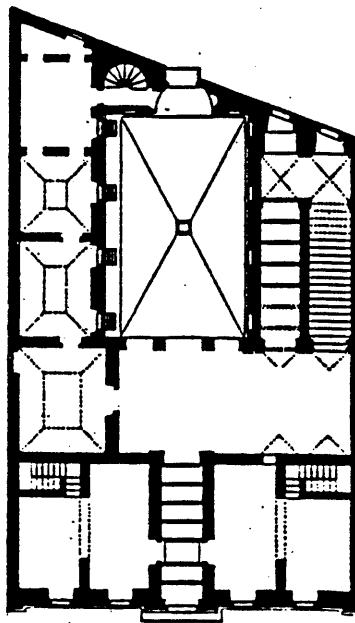
Fig. 37 - Palazzo Le Roy: section through androne and courtyard (from Letarouilly)





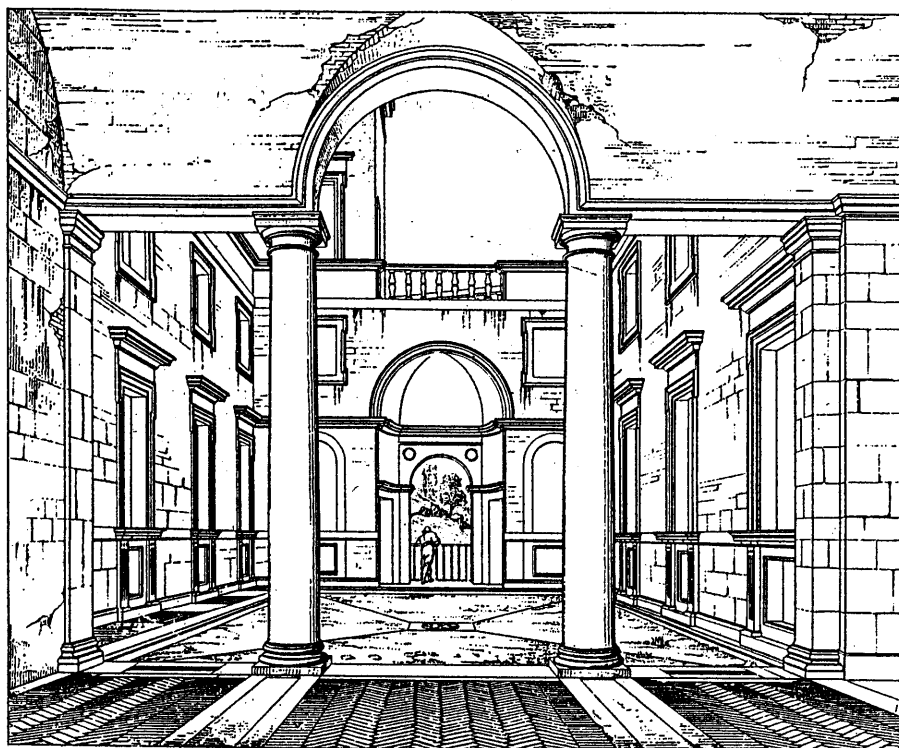


Plan  
du Premier Etage.

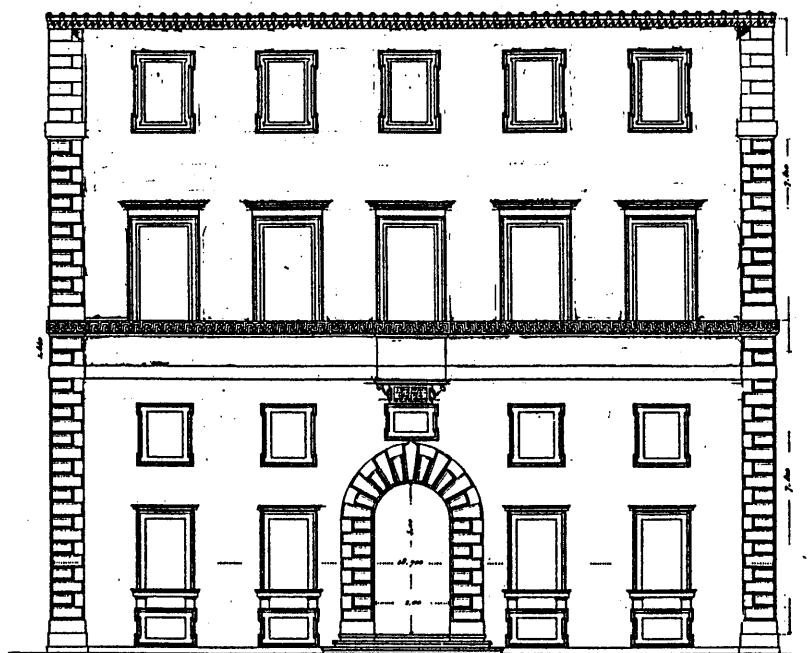


Plan du rez-de-chaussée.

Fig. 39 - Casa Sangallo: plans of ground floor and piano nobile (from Letarouilly)



Vue du Vestibule et du fond de la Cour.



Elévation principale décorée de Peintures à Fresque et en couleur bronze.

Fig. 40 - Casa Sangallo: view of courtyard and main facade (from Letarouilly)

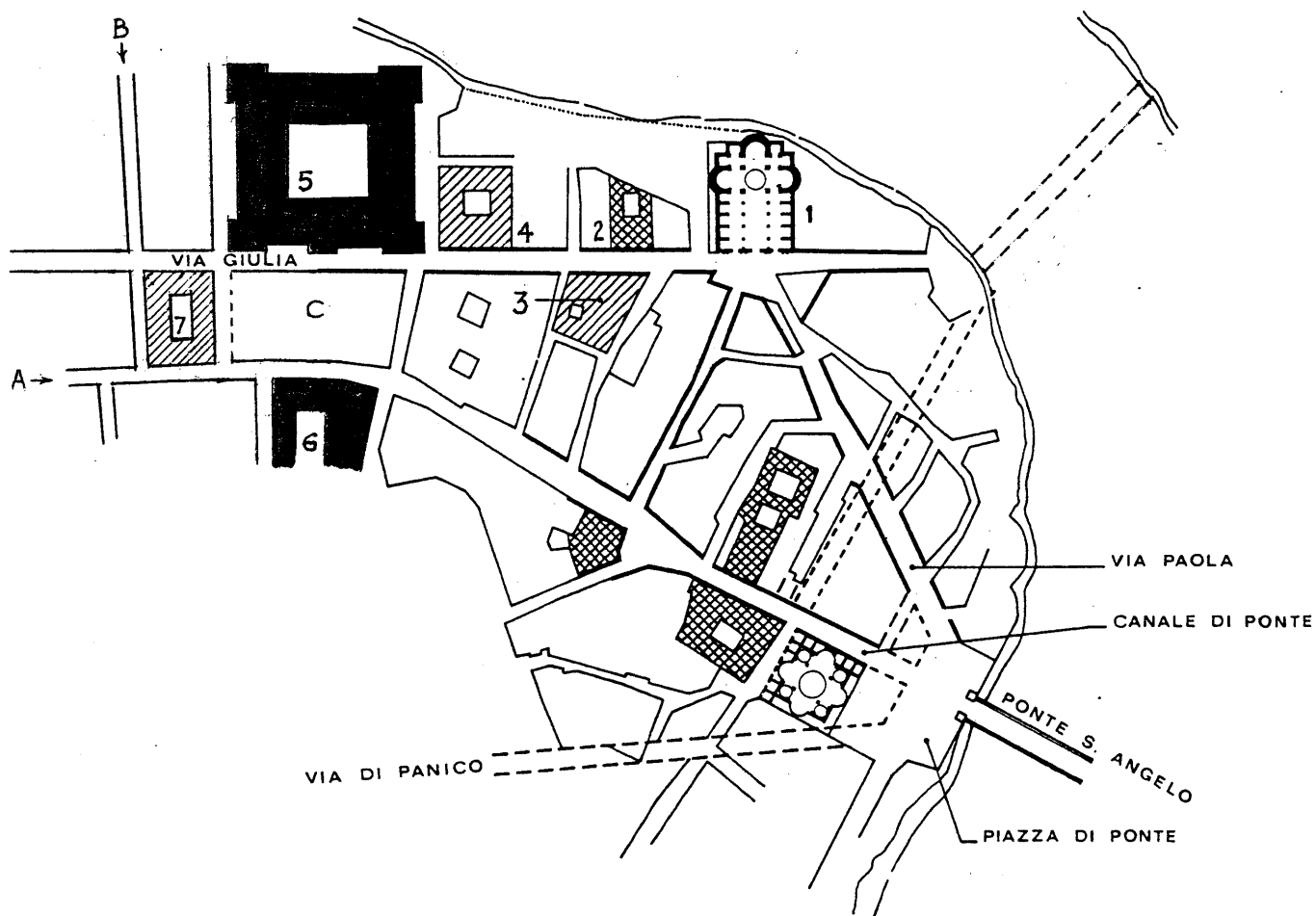


Fig. 41 - Plan of the via Giulia/via dei Banchi Vecchi circa 1520: 1-S. Giovanni dei Fiorentini; 2-Casa Sangallo; 3-Casa di Raffaello; 4-Palazzo Sangallo; 5-Palazzo dei Tribunali; 6-Palazzo della Cancelleria Vecchia (Sforza-Cesarini); 7-Palazzo del Vescovo di Cervia; A-via dei Banchi Vecchi; B- via dei Carceri; C-piazza (based on drawing by M. dalle Mule, in Spagnesi)



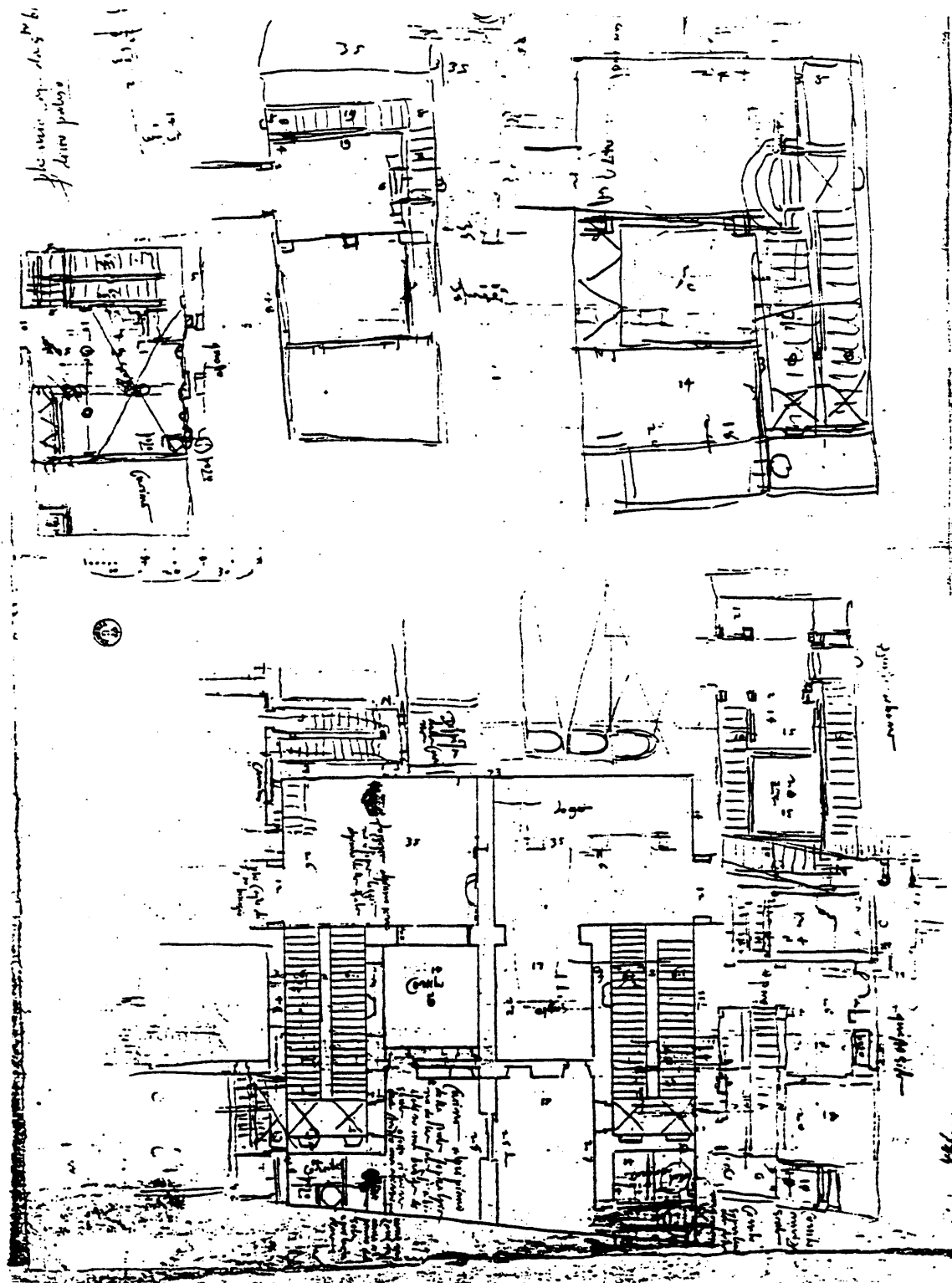


Fig. 43 - Antonio da Sangallo the Younger: plan sketches for the Palazzo Sangallo (Uffizi 984 Ar)

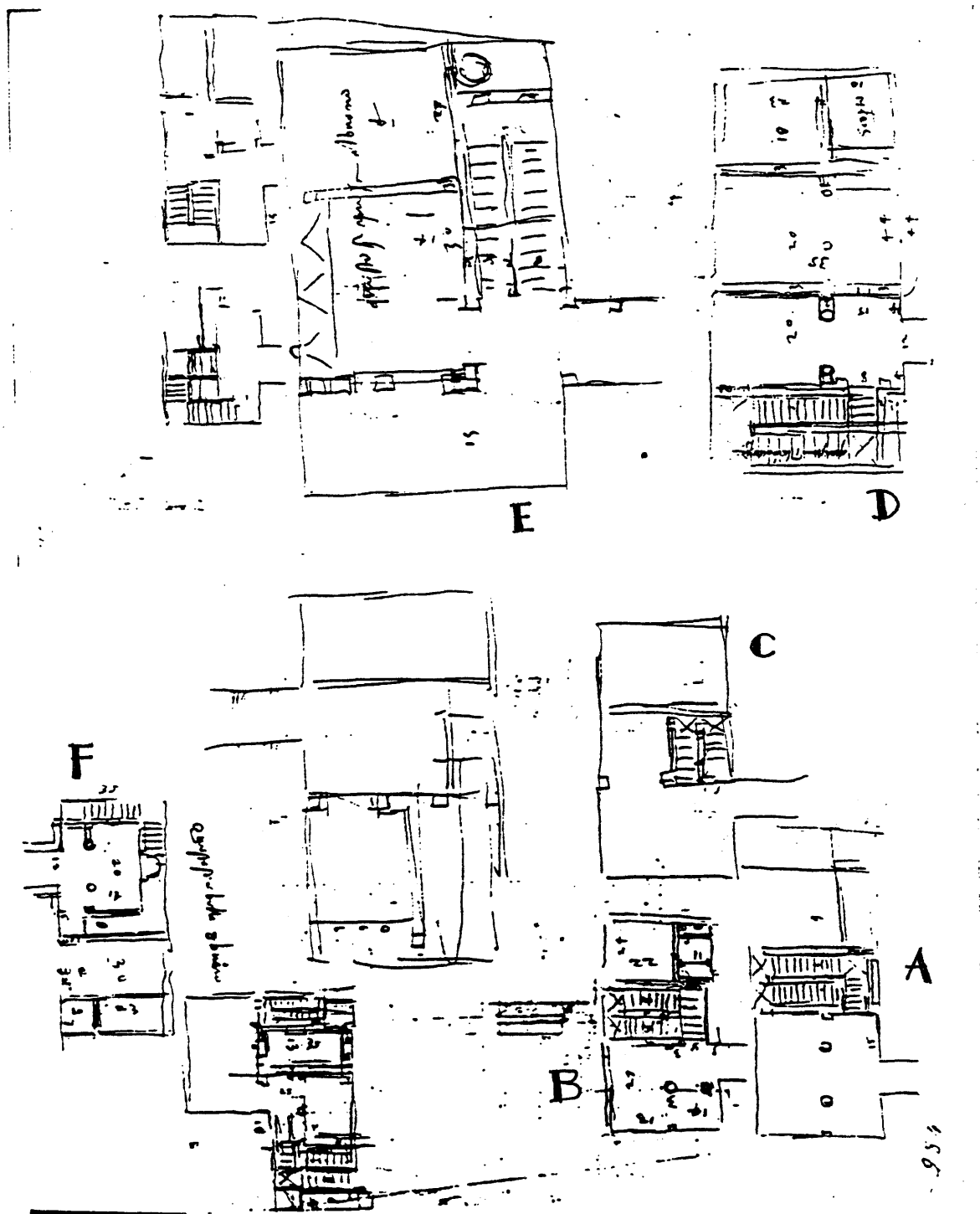


Fig. 44 - Antonio da Sangallo the Younger: plan sketches for the Palazzo Sangallo (Uffizi 984 Av)

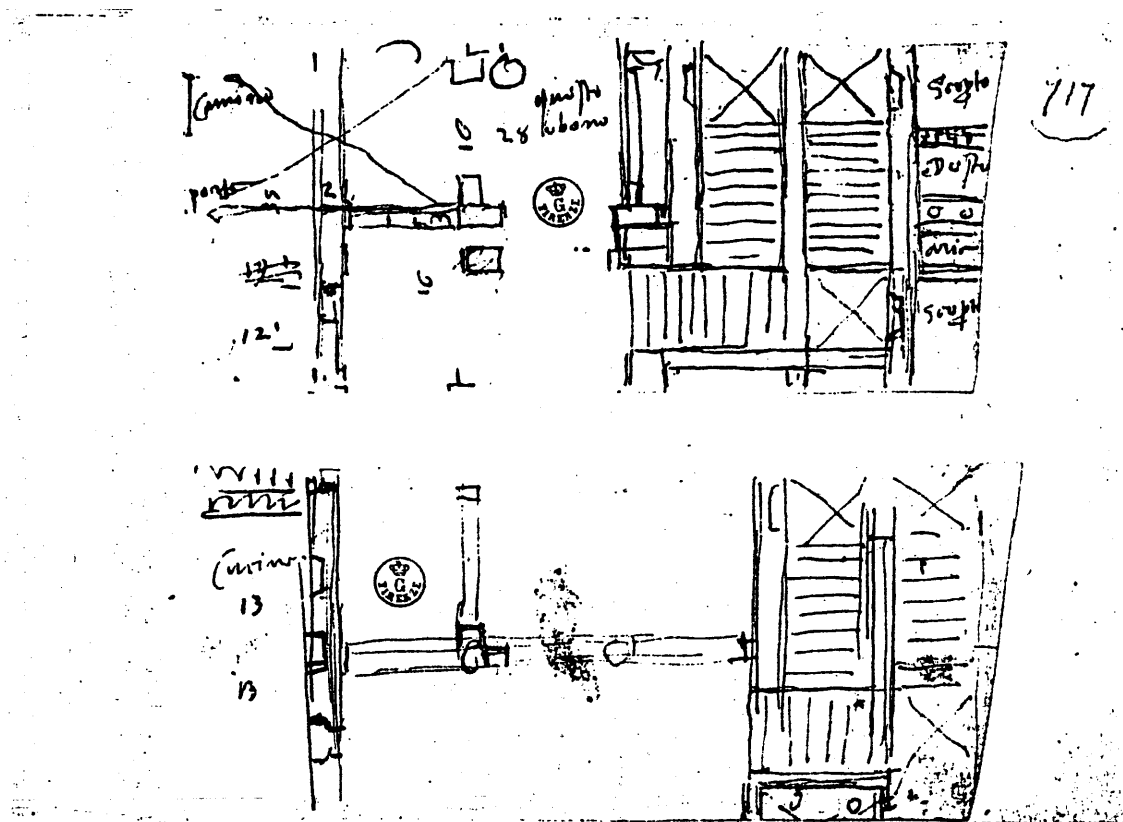


Fig. 45 - Antonio da Sangallo the Younger: plan sketches for the Palazzo Sangallo (Uffizi 985 A)



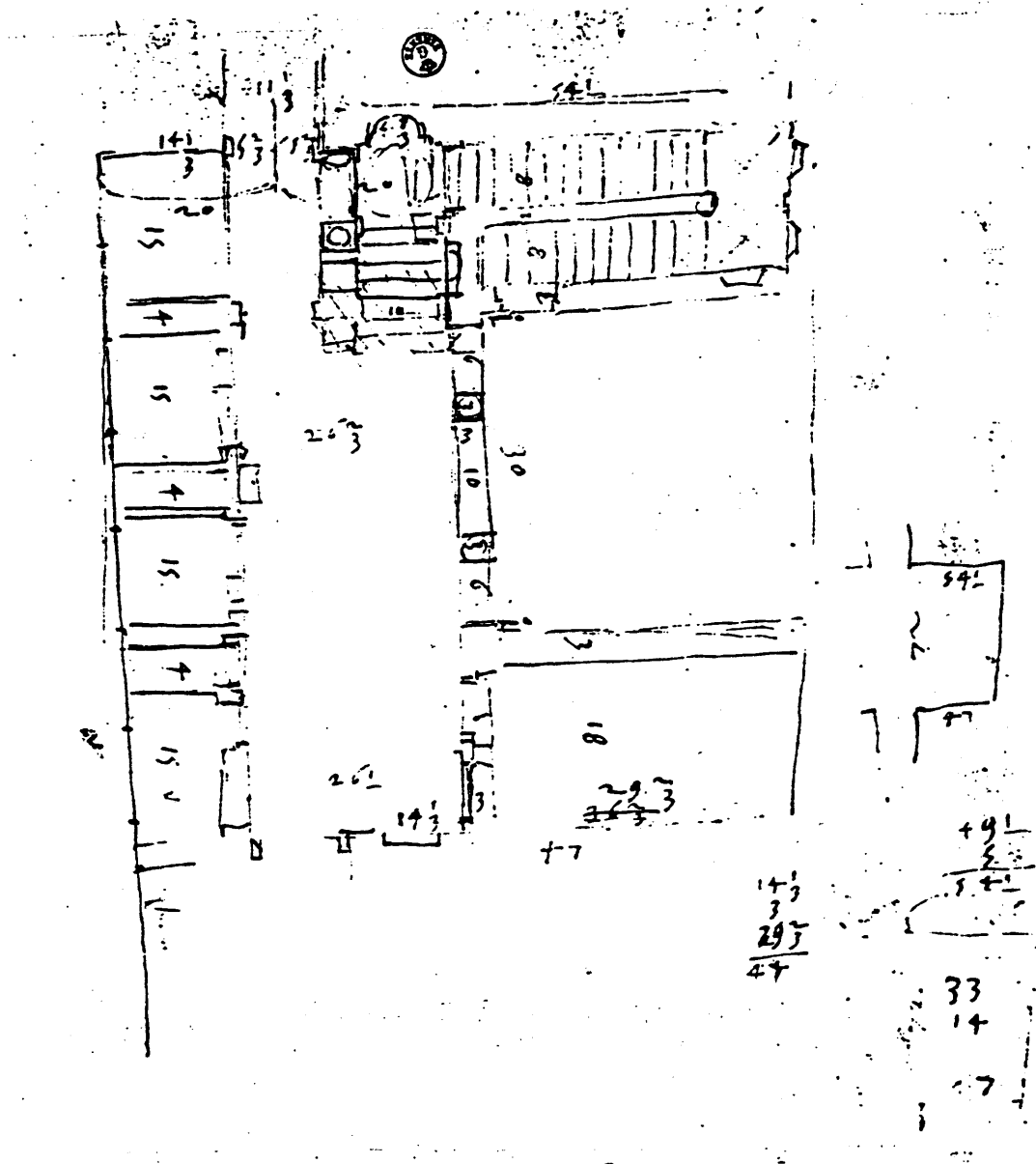


Fig. 46 - Antonio da Sangallo the Younger: plan sketch for the Palazzo Sangallo (Uffizi 1422 A)

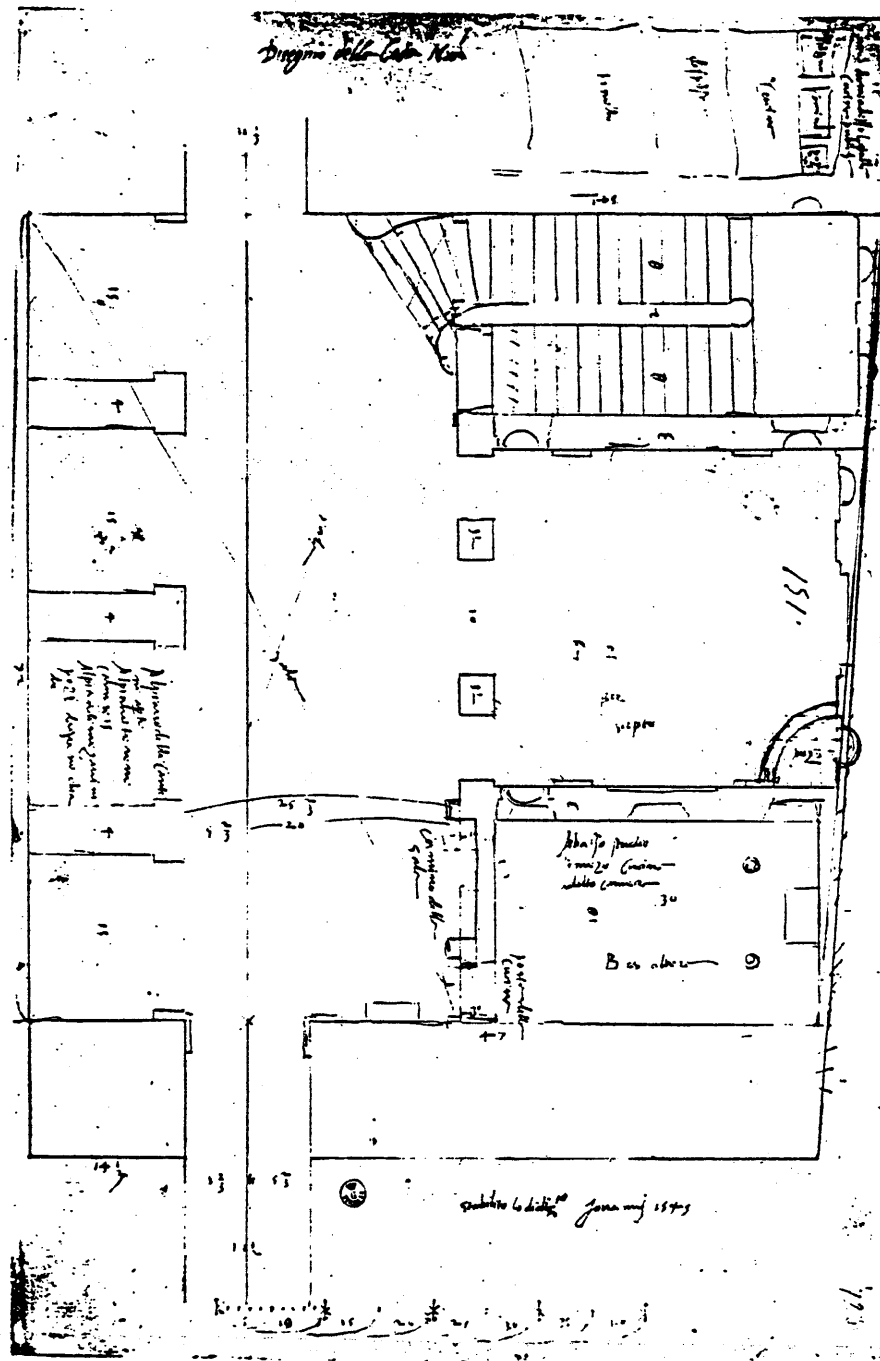


Fig. 47 - Antonio da Sangallo the Younger: plan for central area of Palazzo Sangallo (Uffizi 991 A)

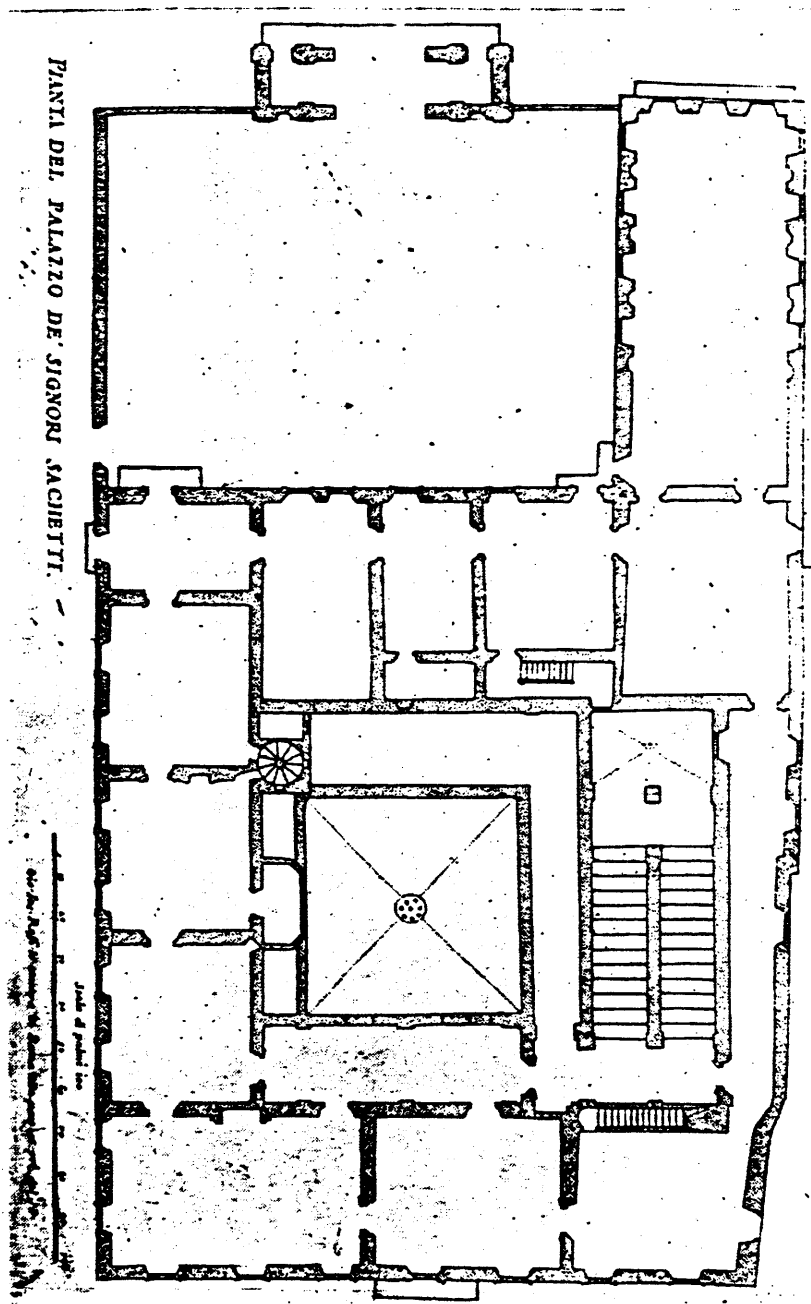


Fig. 48 - Palazzo Sacchetti: piano nobile plan (from Ferrerio & Falda)

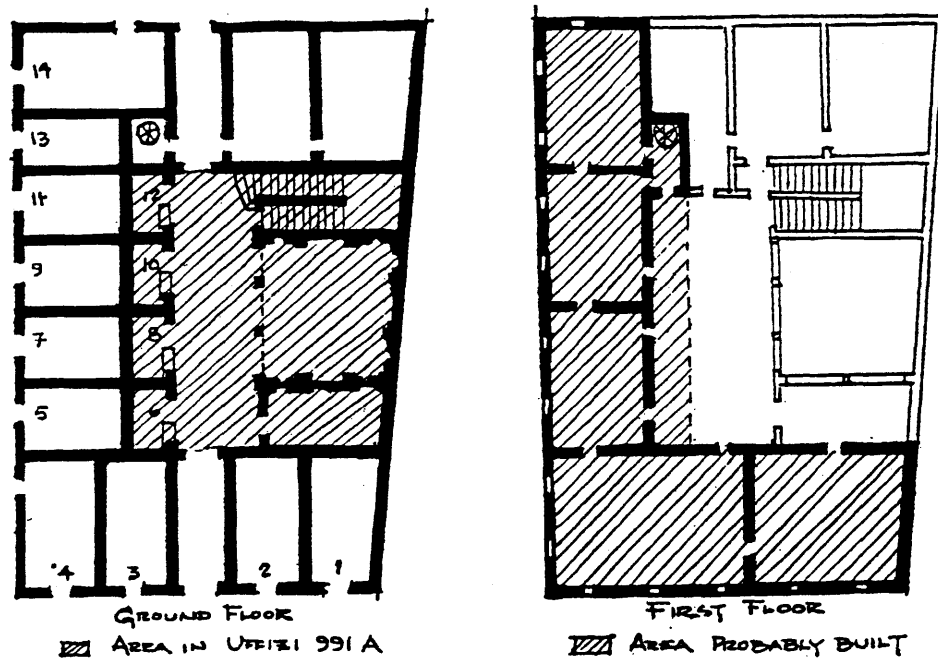


Fig. 49 - Palazzo Sangallo: reconstruction of original plans and facade (from Andres)

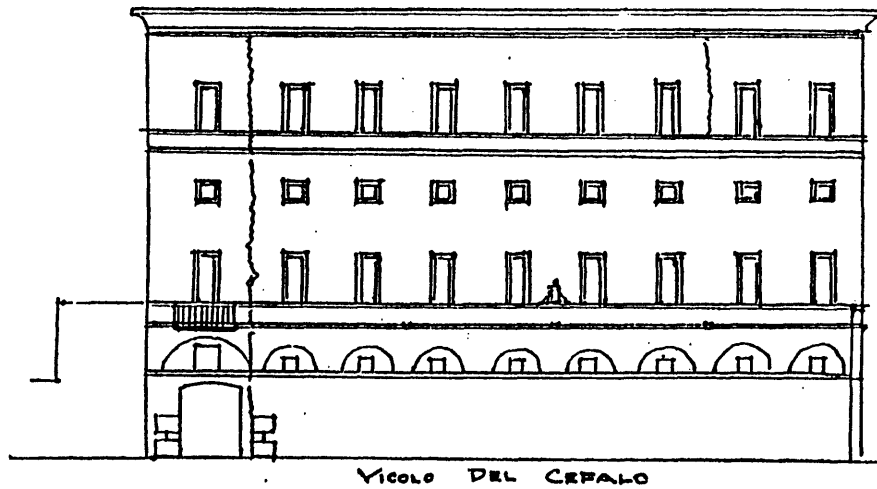
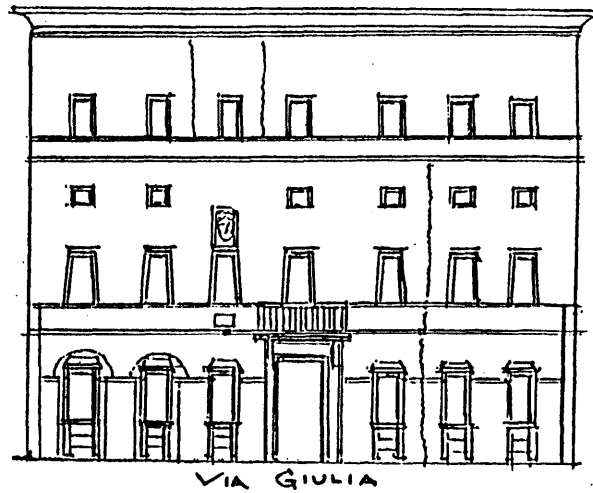


Fig. 50 - Palazzo Sacchetti: street elevations (from Andres)

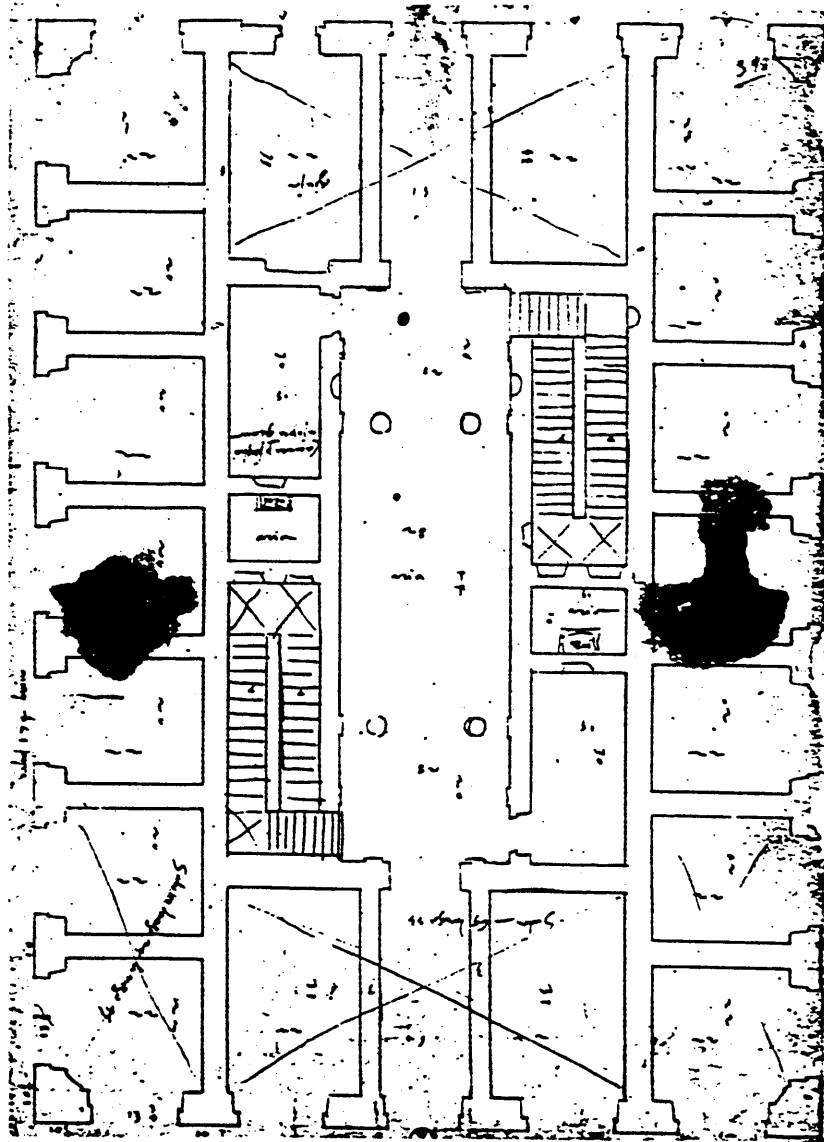


Fig. 51 - Antonio da Sangallo the Younger: plan for Palazzo del Vescovo di Cervia (Uffizi 709 A)

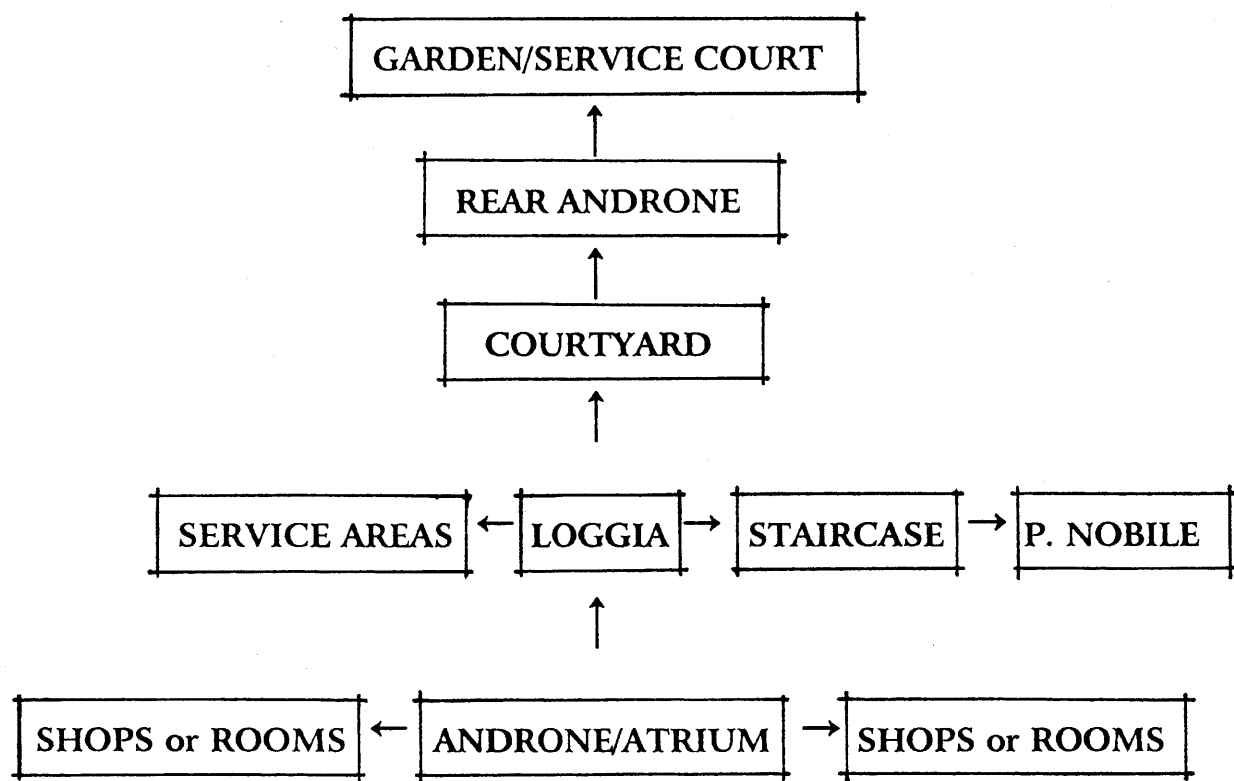


Fig. 52 - Basic arrangement of Sangallo's palace plans (author)

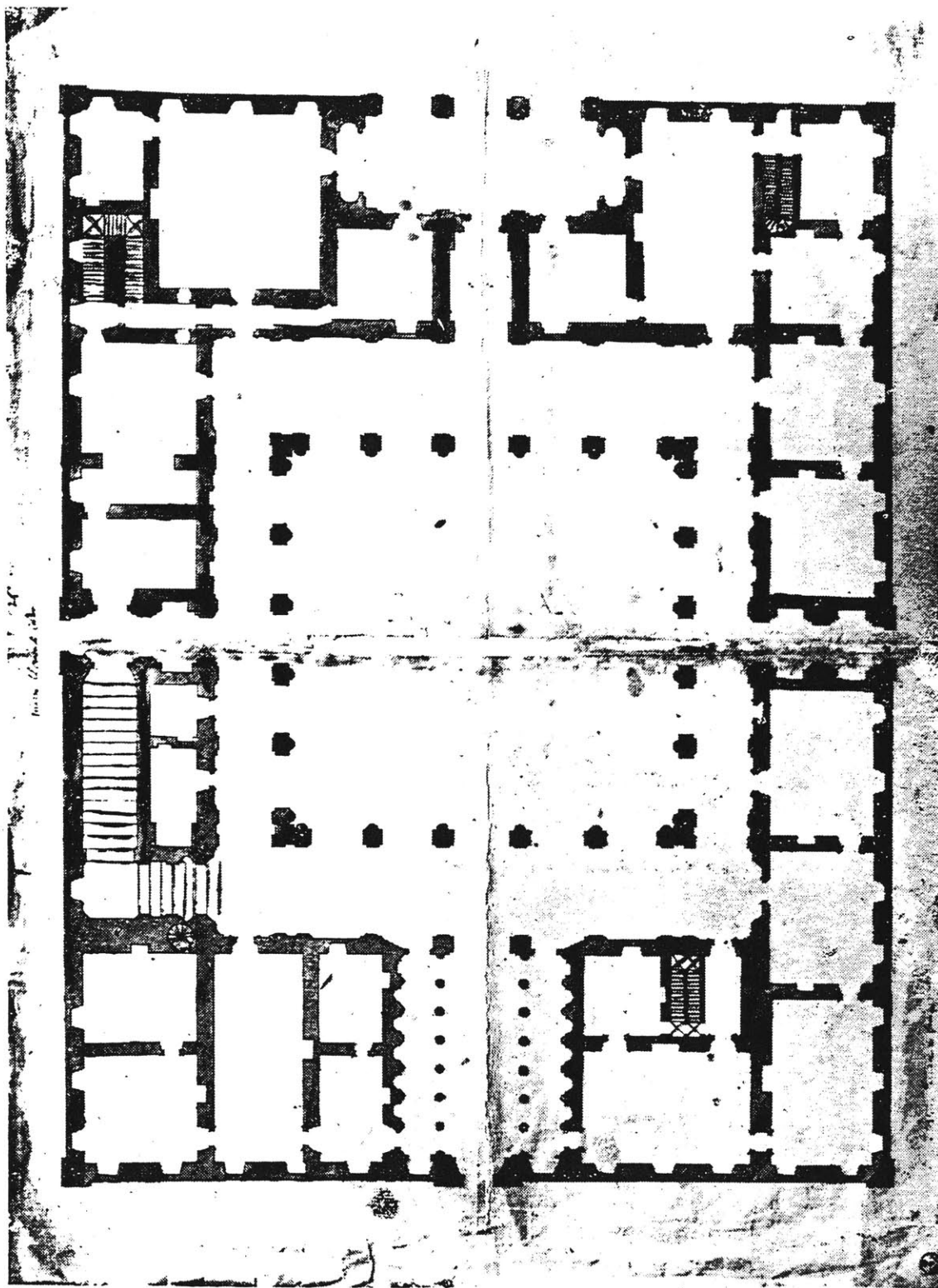


Fig. 53 - Antonio da Sangallo the Younger: plan for Palazzo Farnese (Uffizi 298 A)



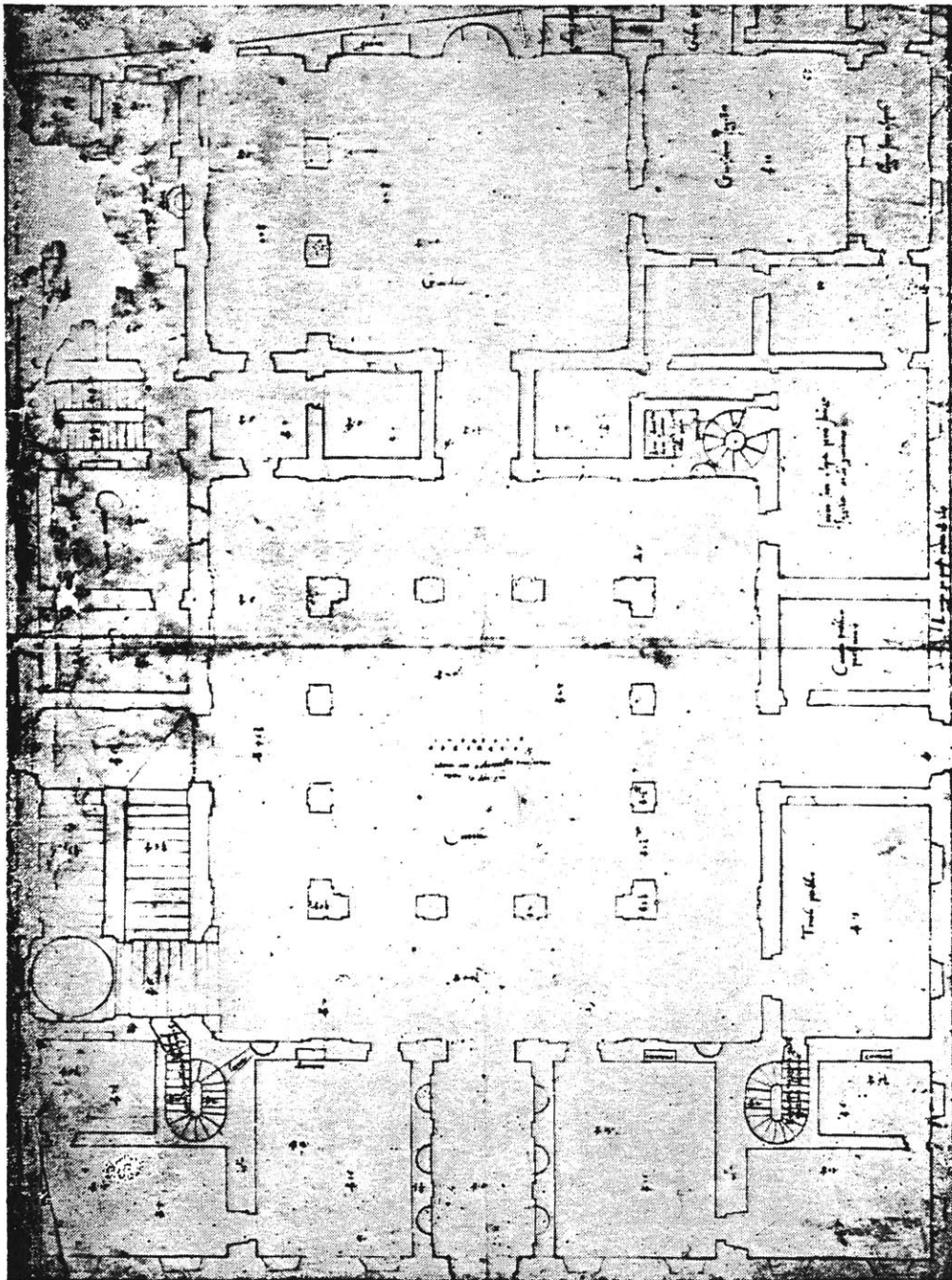


Fig. 54 - Antonio da Sangallo the Younger: plan for Palazzo Cantelli in Parma (Uffizi 292 A)

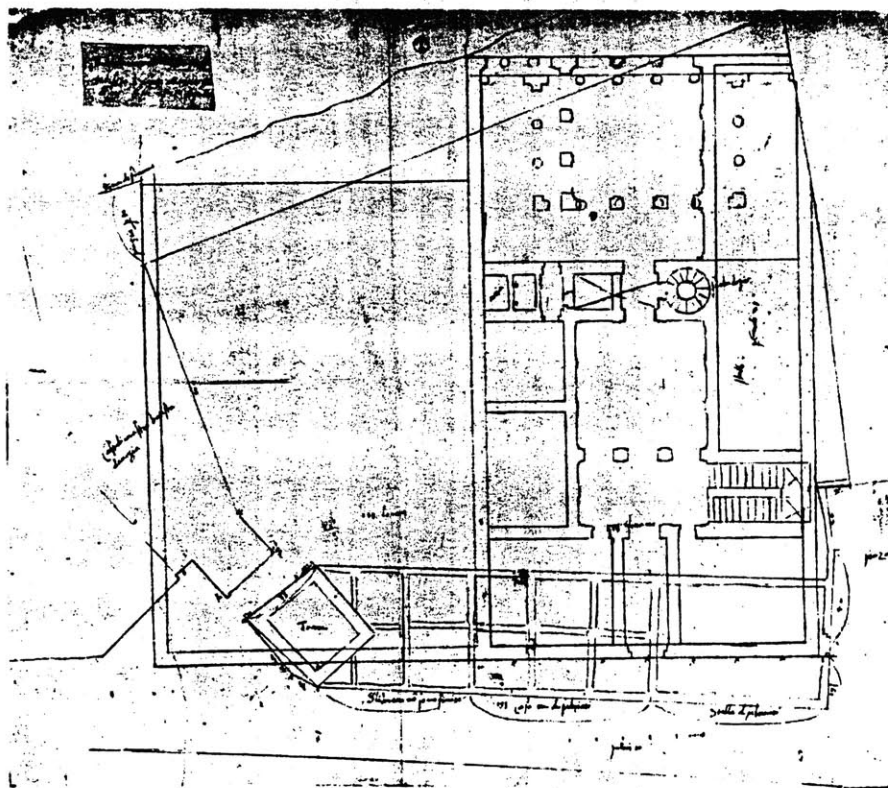
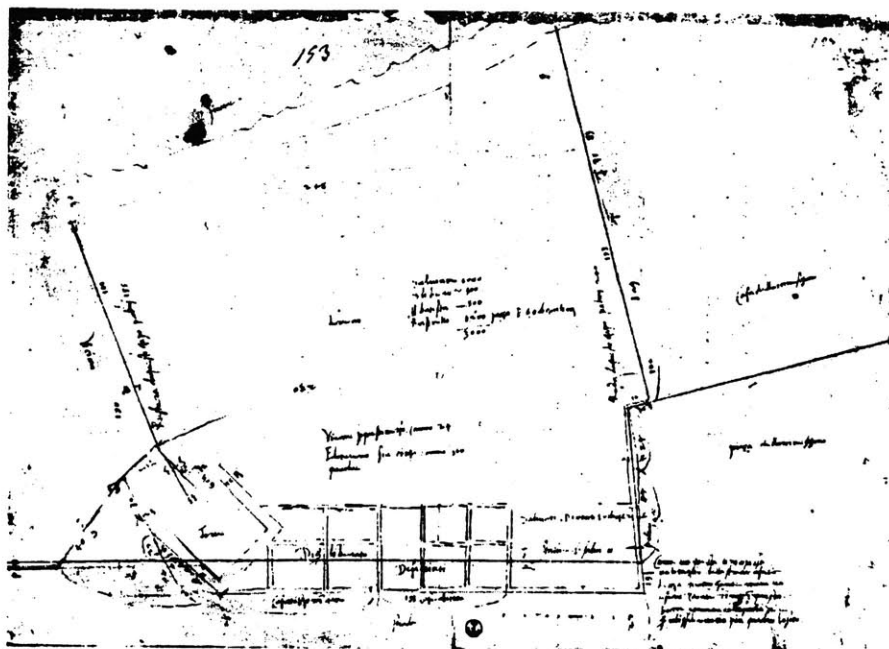


Fig. 55 - Antonio da Sangallo the Younger: survey of site for Palazzo Turini (Uffizi 996 A)

Fig. 56 - Antonio da Sangallo the Younger: plan for Palazzo Turini (Uffizi 997 A)

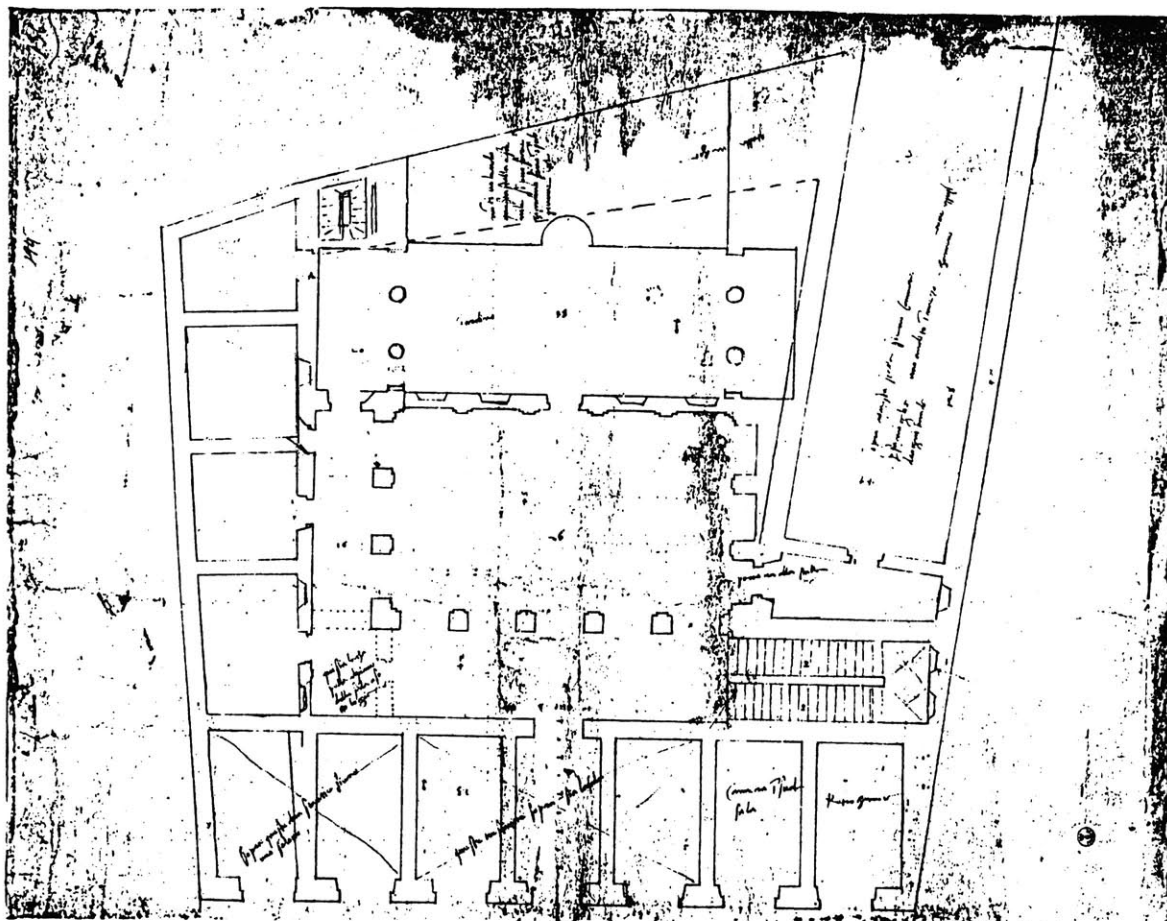


Fig. 57 - Antonio da Sangallo the Younger: plan for Palazzo Orsini (Uffizi 1004 A)



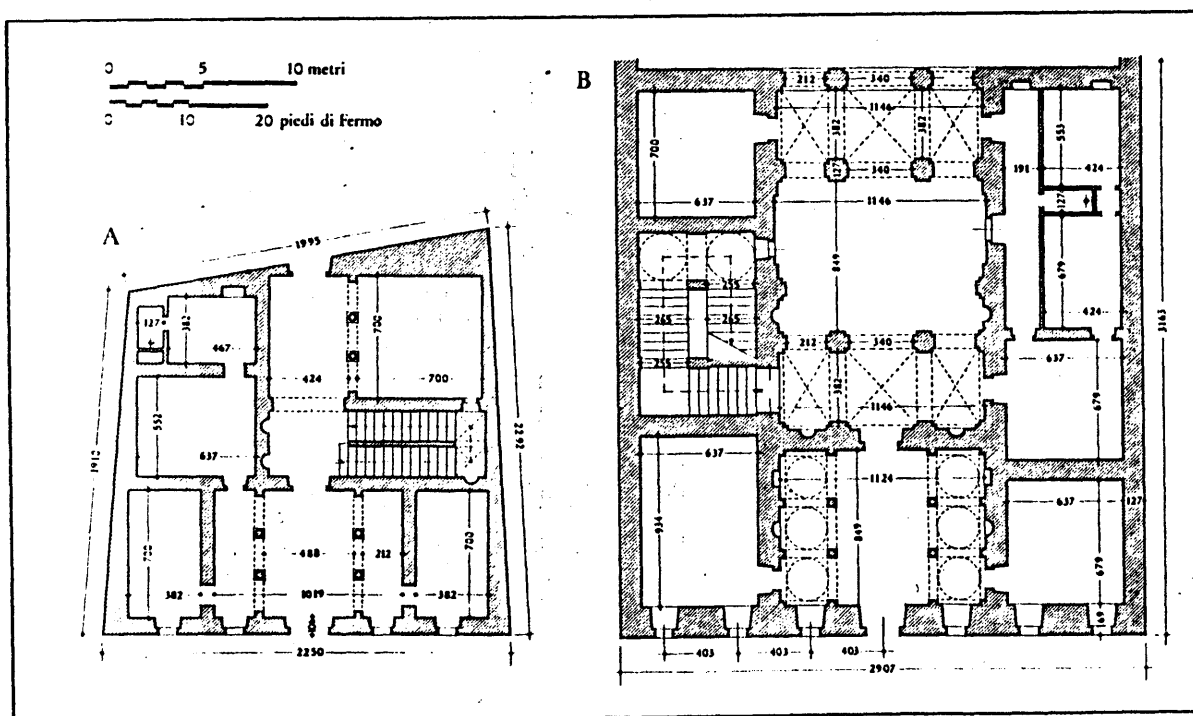
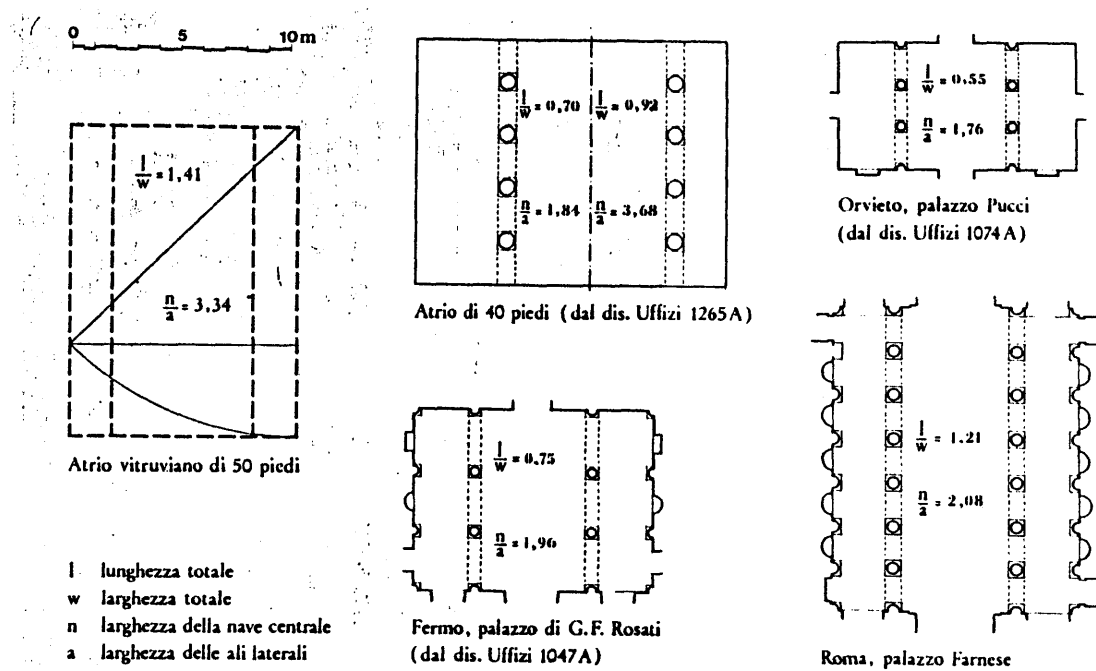


Fig. 59 - Atriums designed by Antonio da Sangallo the Younger (from Salimberni)  
Fig. 60 - Palazzi Girolamo Rosati and Giovan Francesco Rosati in Fermo:  
reconstruction of original plans (from Salimberni)

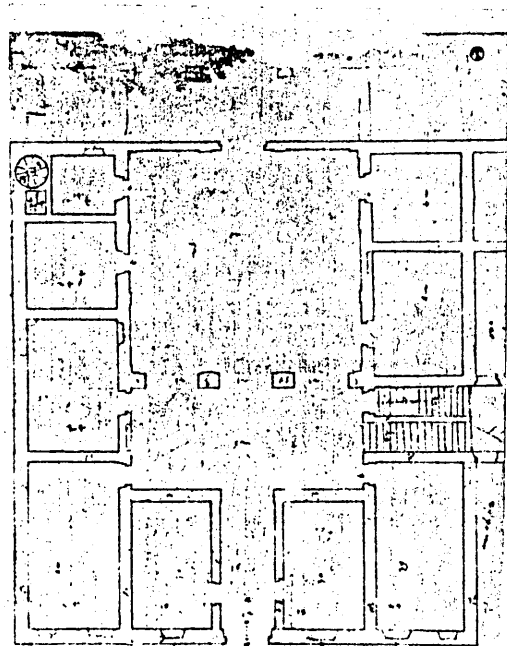
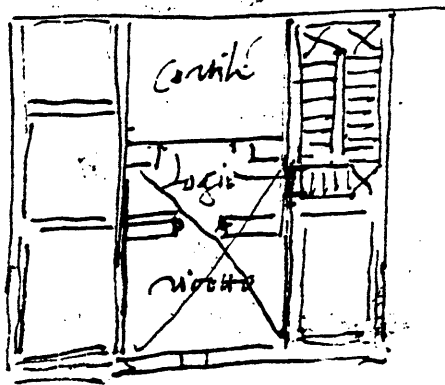
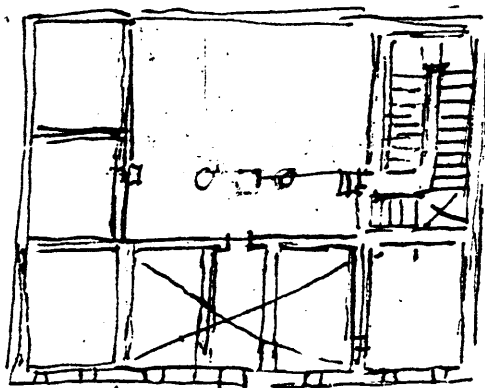


Fig. 61 - Antonio da Sangallo the Younger: plans for Palazzo Crispo in Orvieto (Uffizi 960)

Fig. 62 - Antonio da Sangallo the Younger: plan for Palazzo Farratini in Amelia (Uffizi 1280)

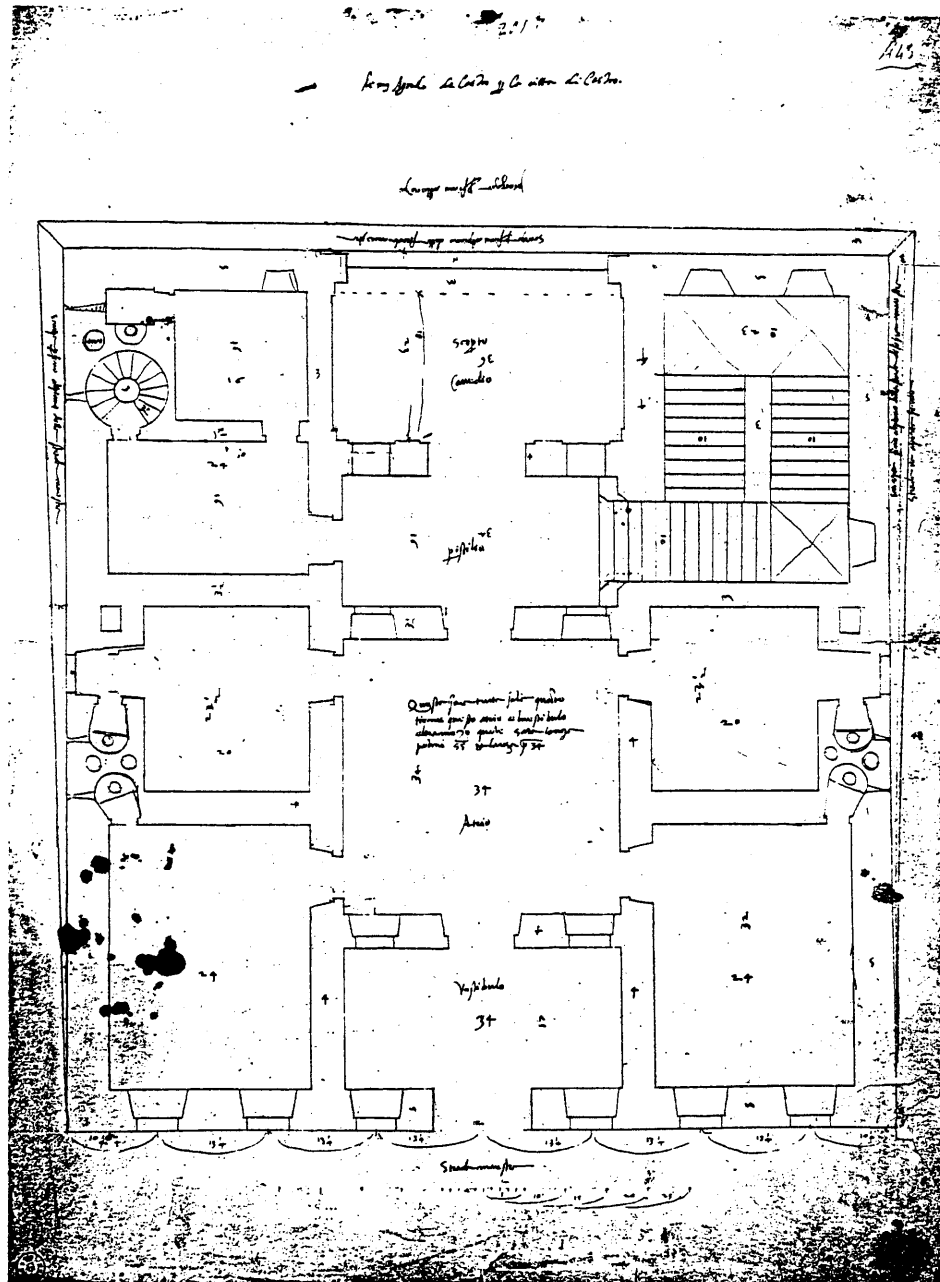


Fig. 63 - Antonio da Sangallo the Younger: plan for a house in Castro (Uffizi 747)

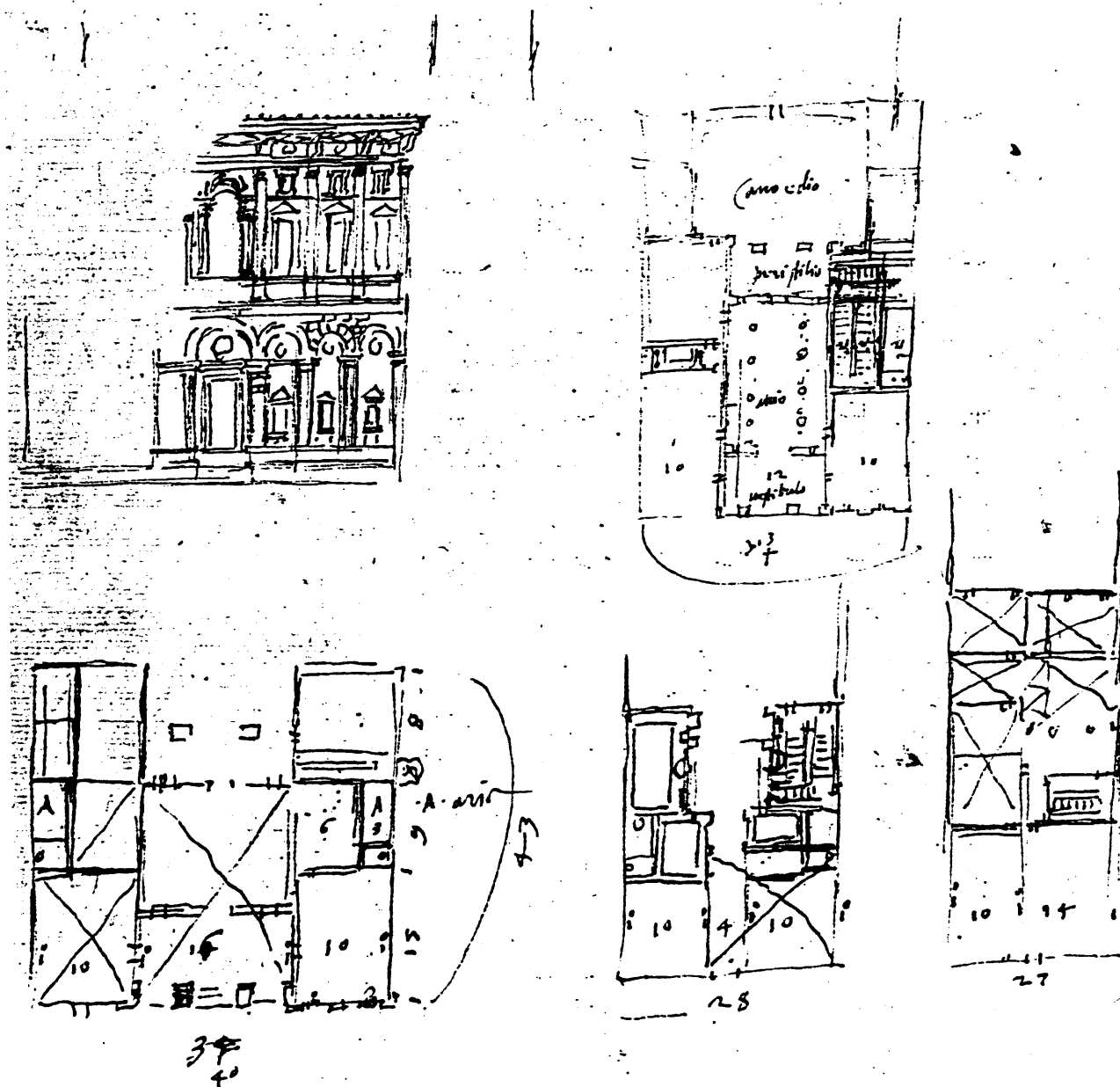


Fig. 64 - Antonio da Sangallo the Younger: plans for palaces (Uffizi 1235)



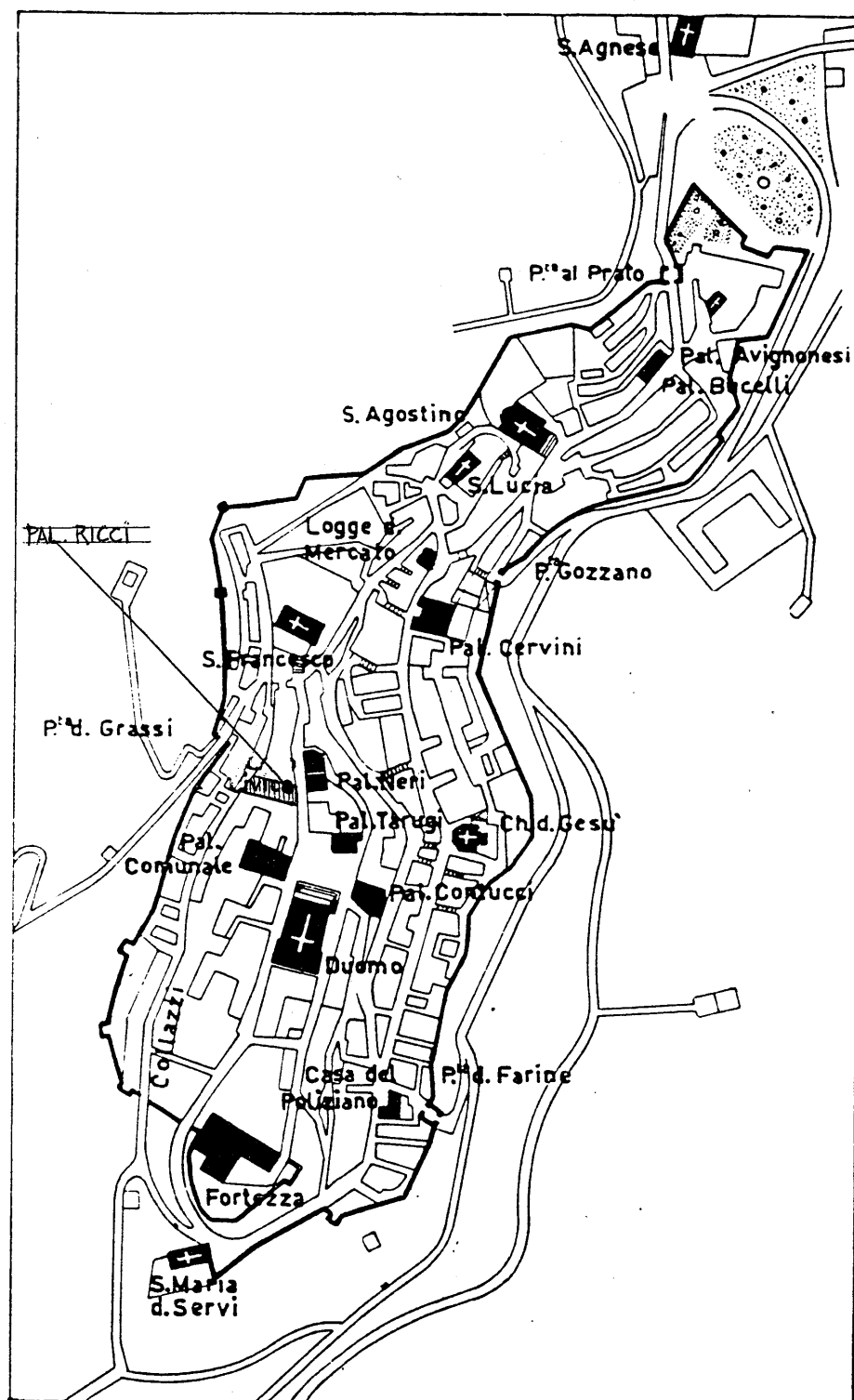


Fig. 65 - Montepulciano: plan with location of Palazzo Ricci

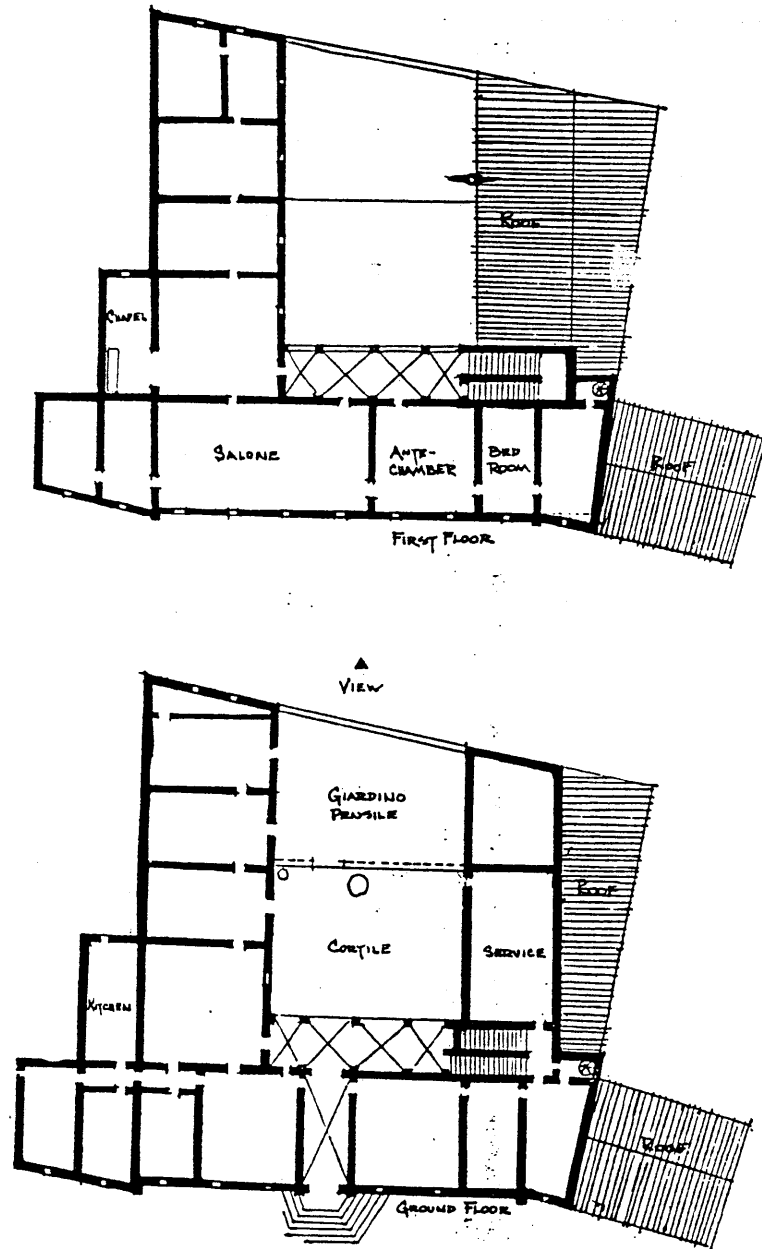


Fig. 66 - Palazzo Ricci: plans as built (from Andres)

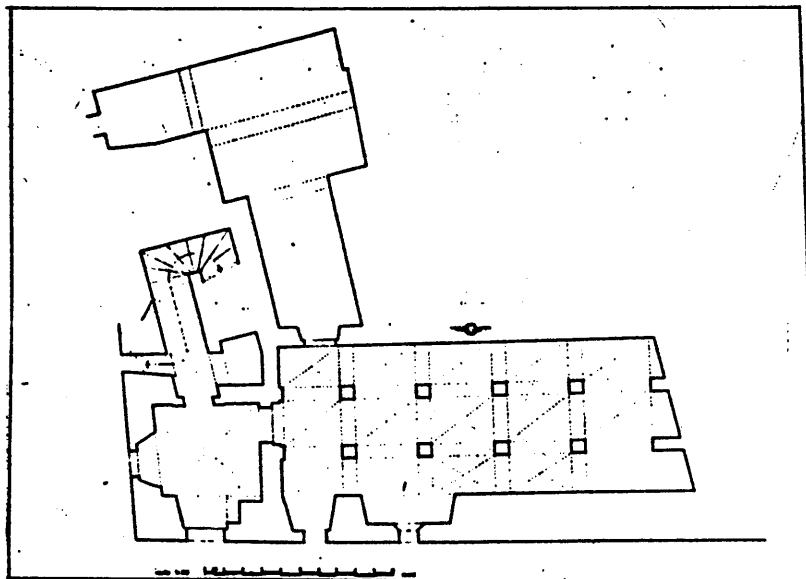
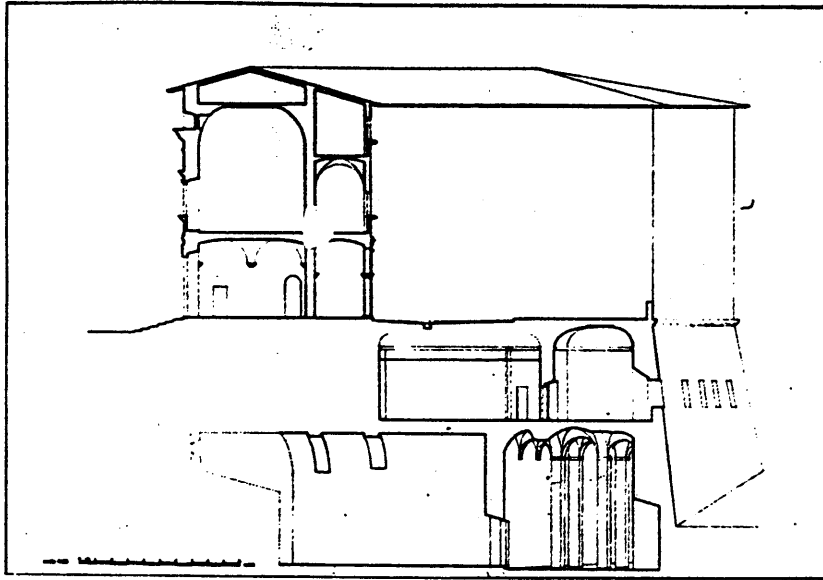


Fig. 67 - Palazzo Ricci: longitudinal section and plan of cellars (from Morganti)

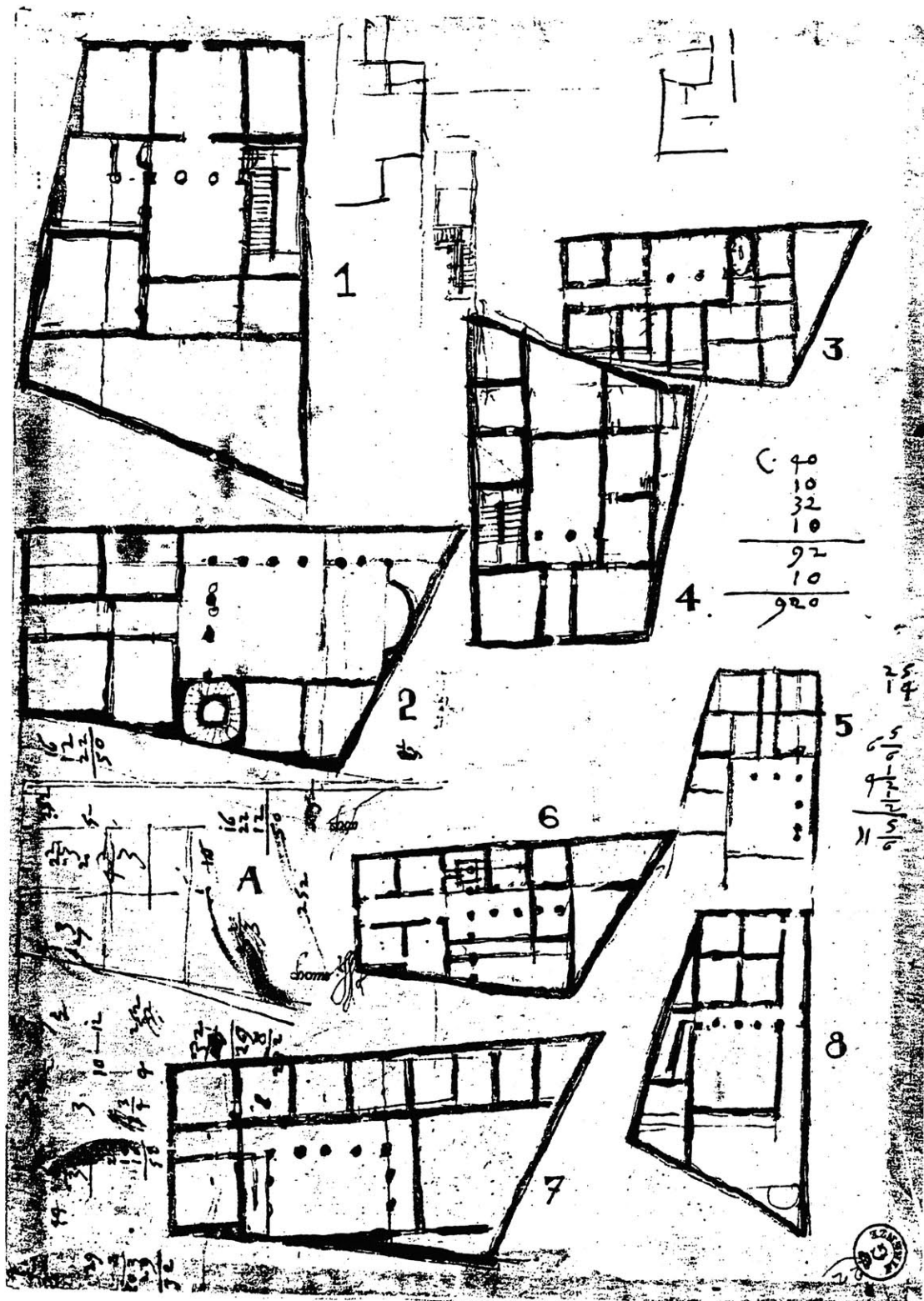


Fig. 68 - Baldassare Peruzzi: plan sketches for Palazzo Ricci (Uffizi 359)

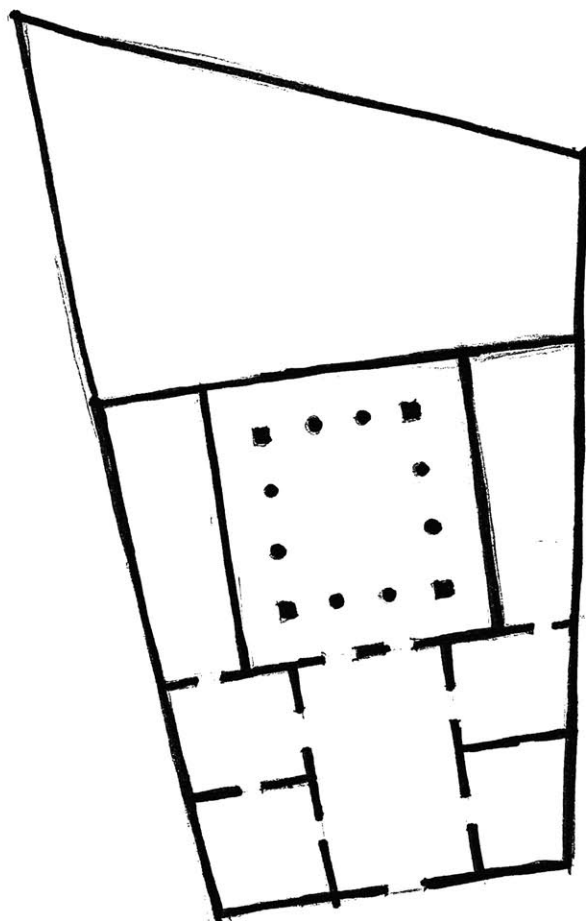


Fig. 69 - Palazzo Ricci: reconstruction of plan sketch from Uffizi 355v (author)

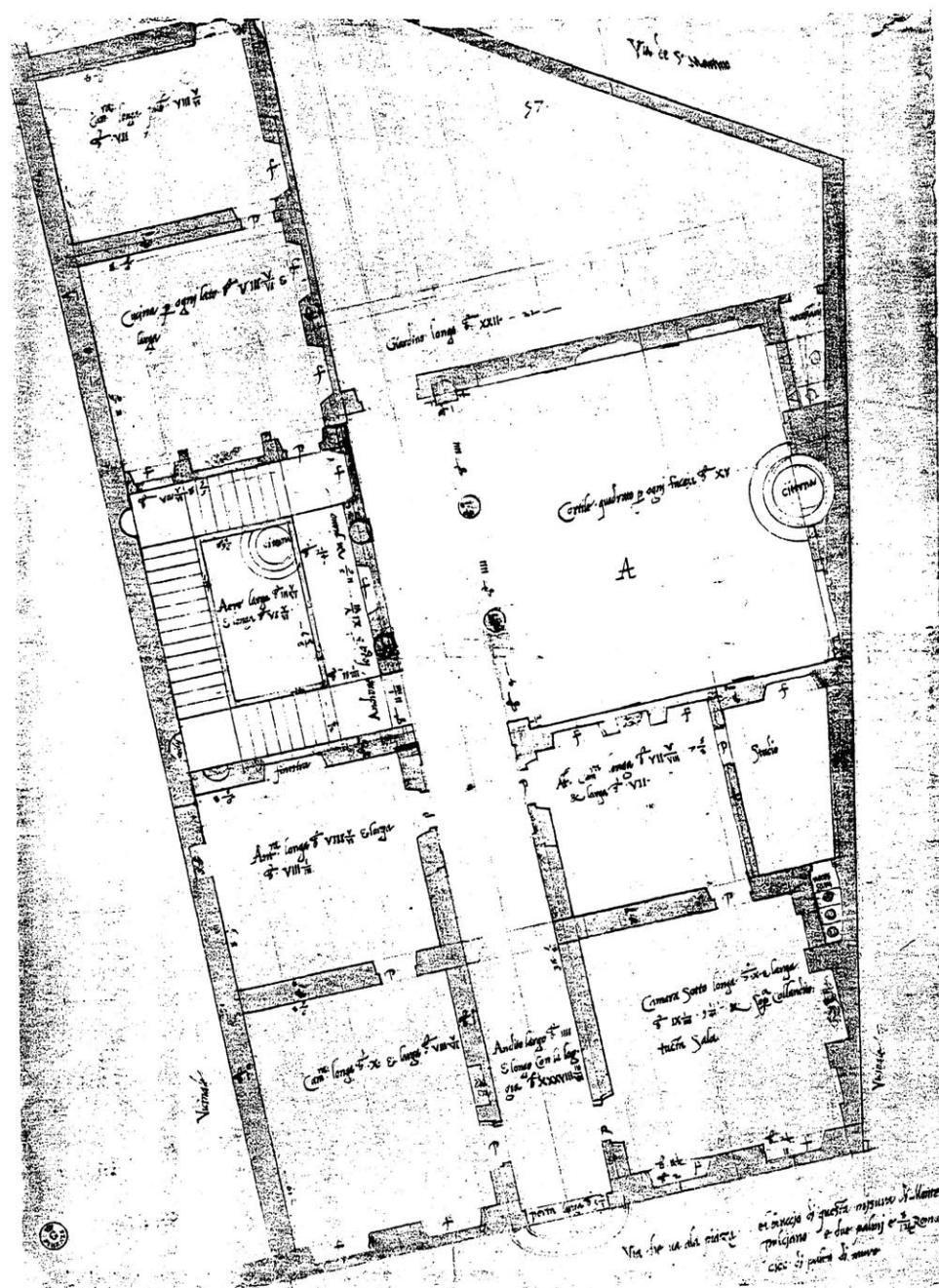


Fig. 70 - Baldassare Peruzzi: plan "A" for Palazzo Ricci (Uffizi 355r)

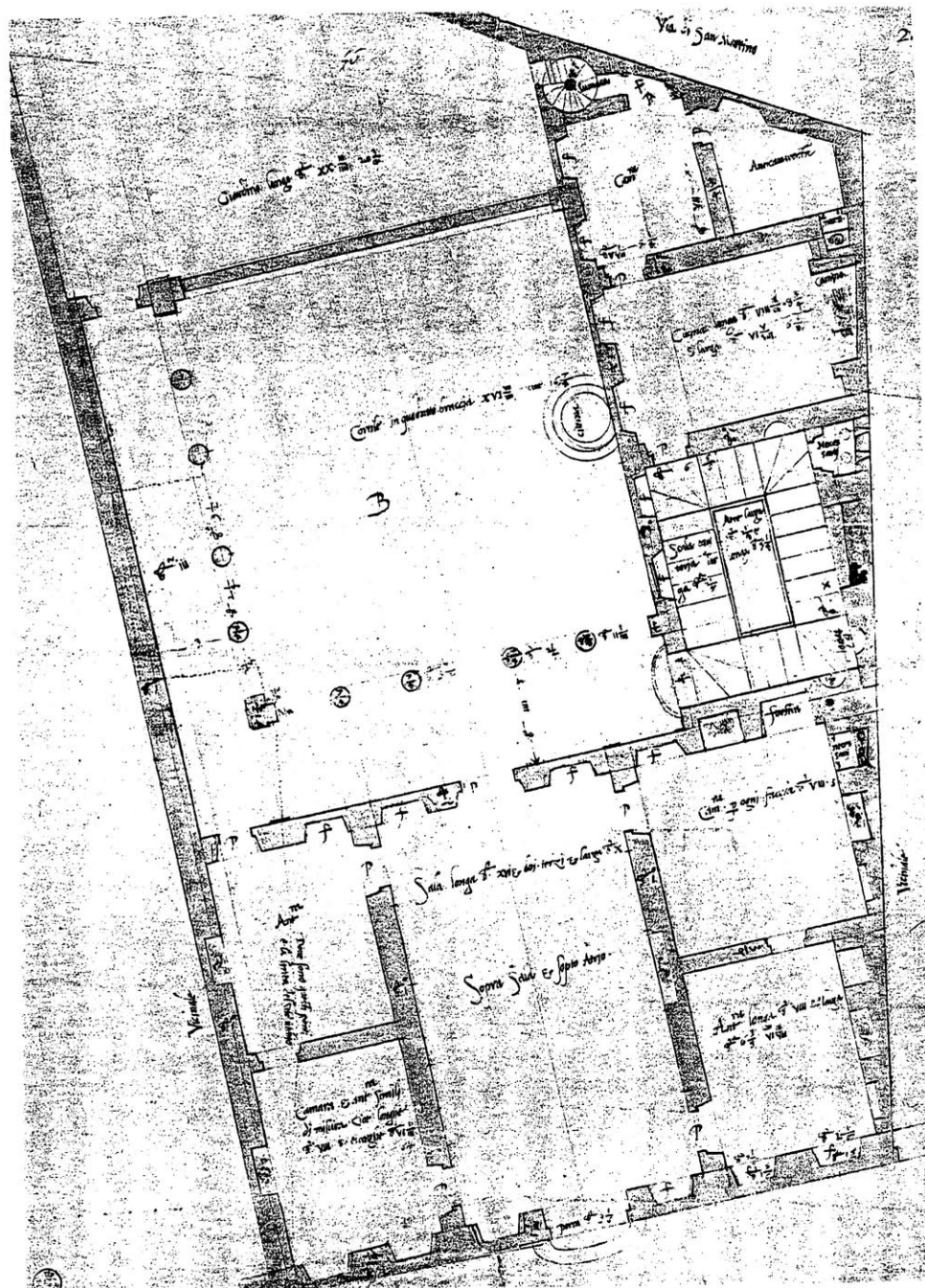


Fig. 71 - Baldassare Peruzzi: plan "B" for Palazzo Ricci (Uffizi 356r)

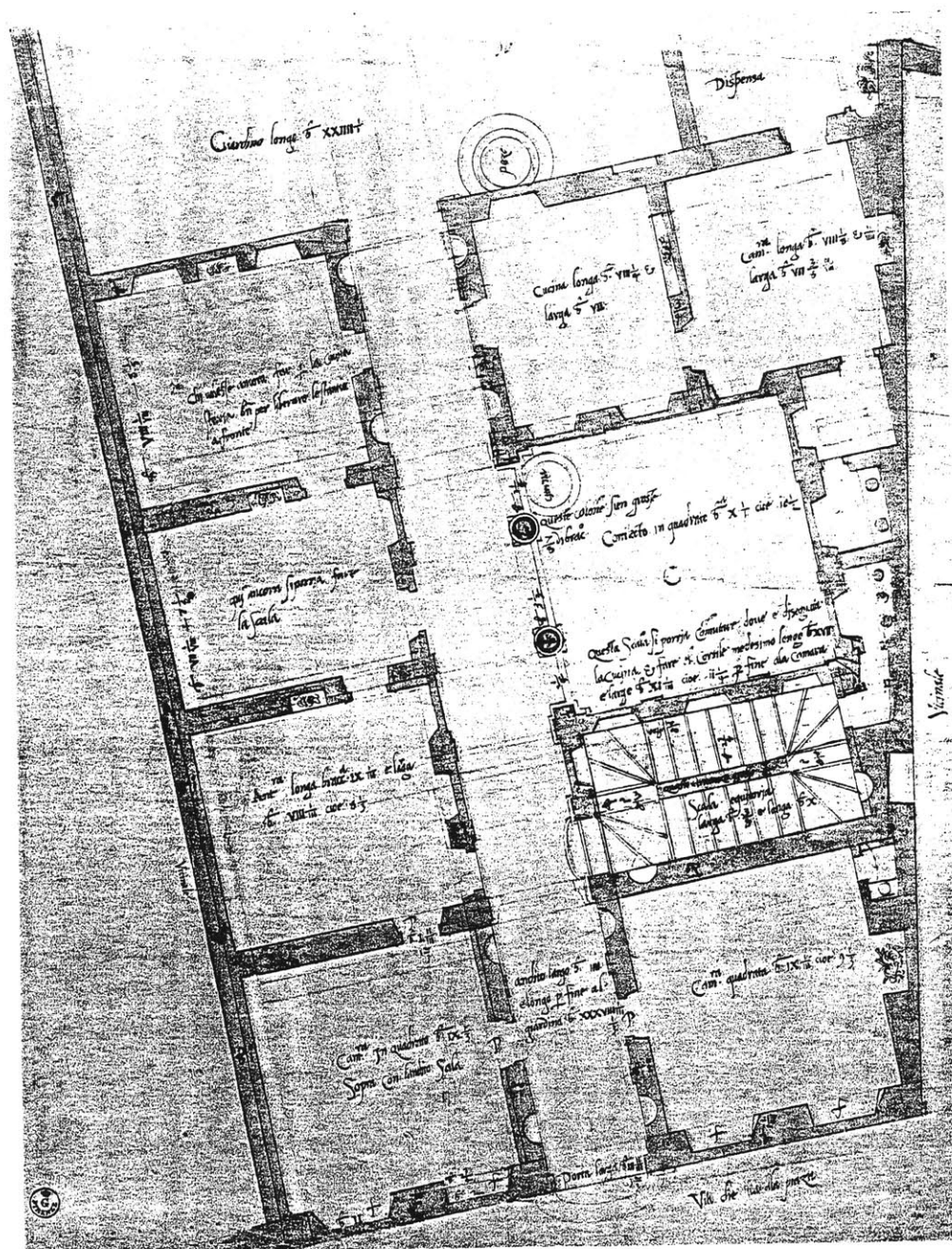


Fig. 72 - Baldassare Peruzzi: plan "C" for Palazzo Ricci (Uffizi 357)



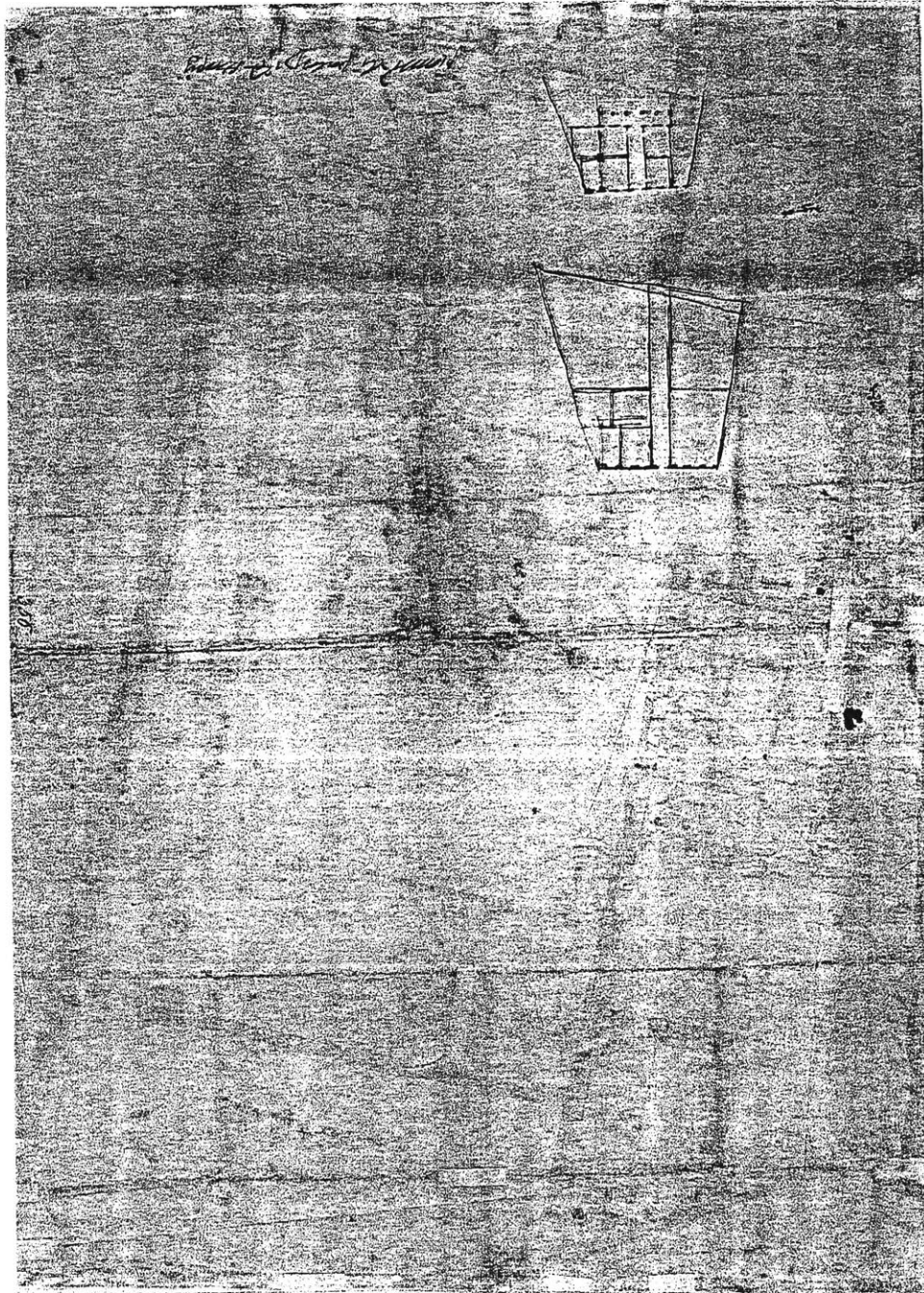


Fig. 73 - Baldassare Peruzzi: plan sketches for Palazzo Ricci (Uffizi 356v)

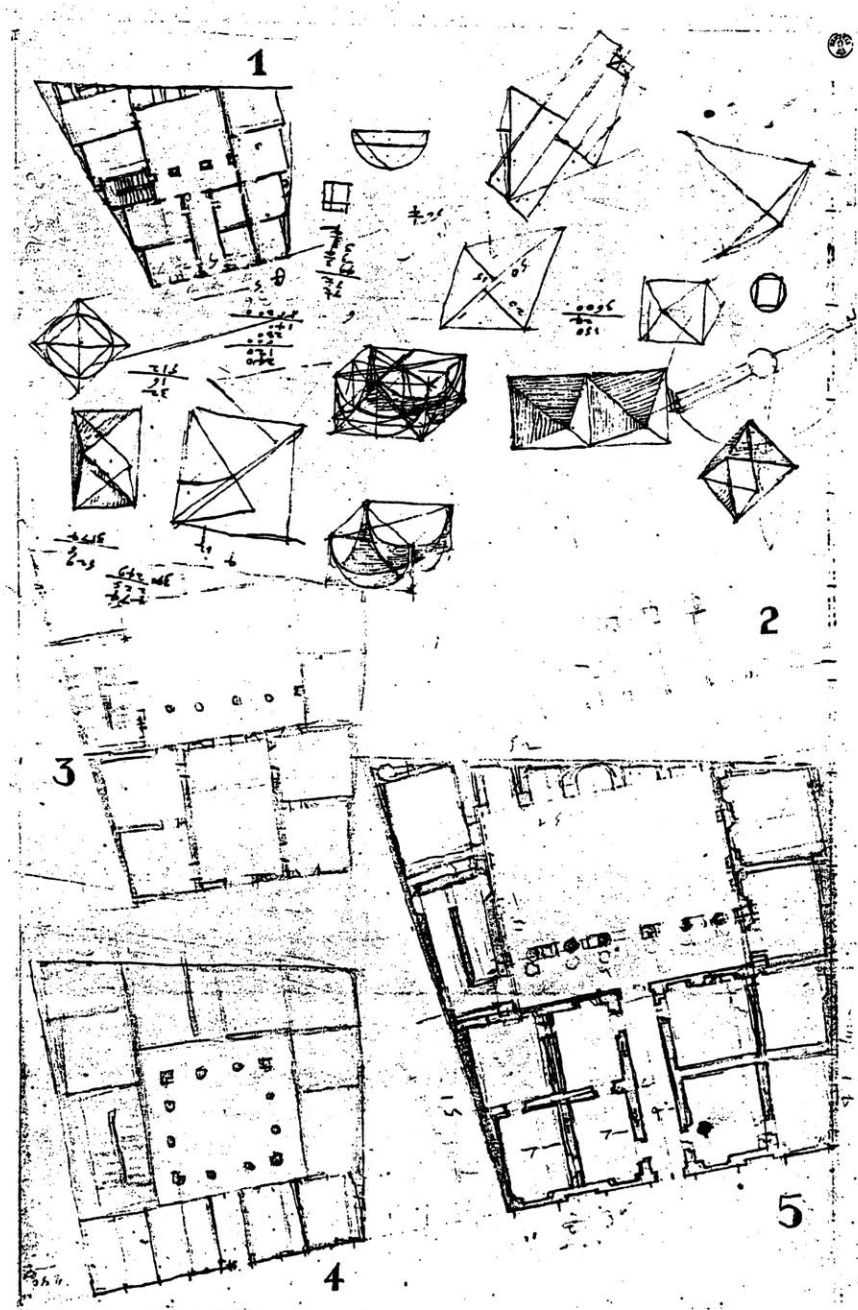


Fig. 74 - Baldassare Peruzzi: plan sketches for Palazzo Ricci (Uffizi 594)

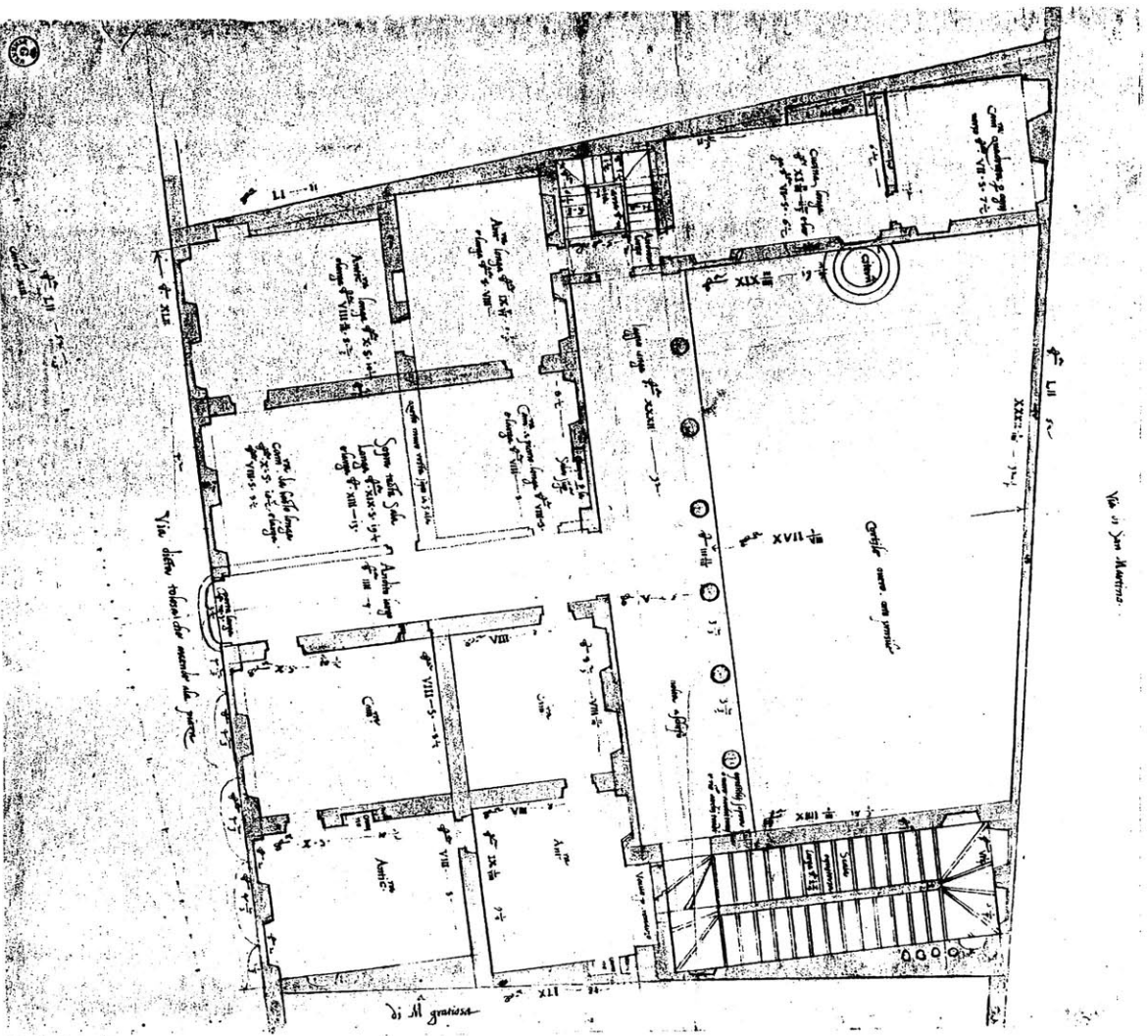


Fig. 75 - Baldassare Peruzzi: plan for Palazzo Ricci (Uffizi 358)

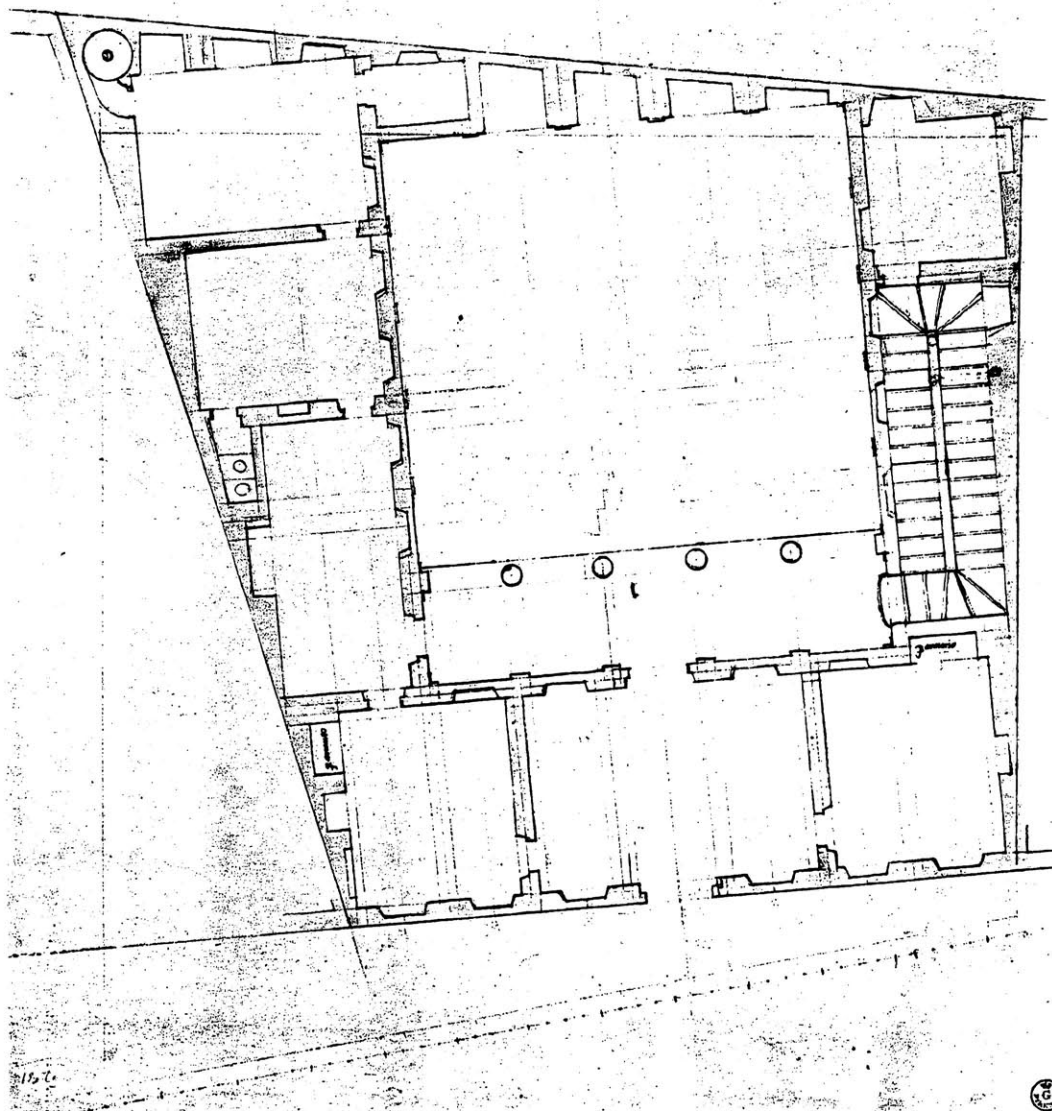


Fig. 76 - Baldassare Peruzzi: plan for Palazzo Ricci (Uffizi 595)

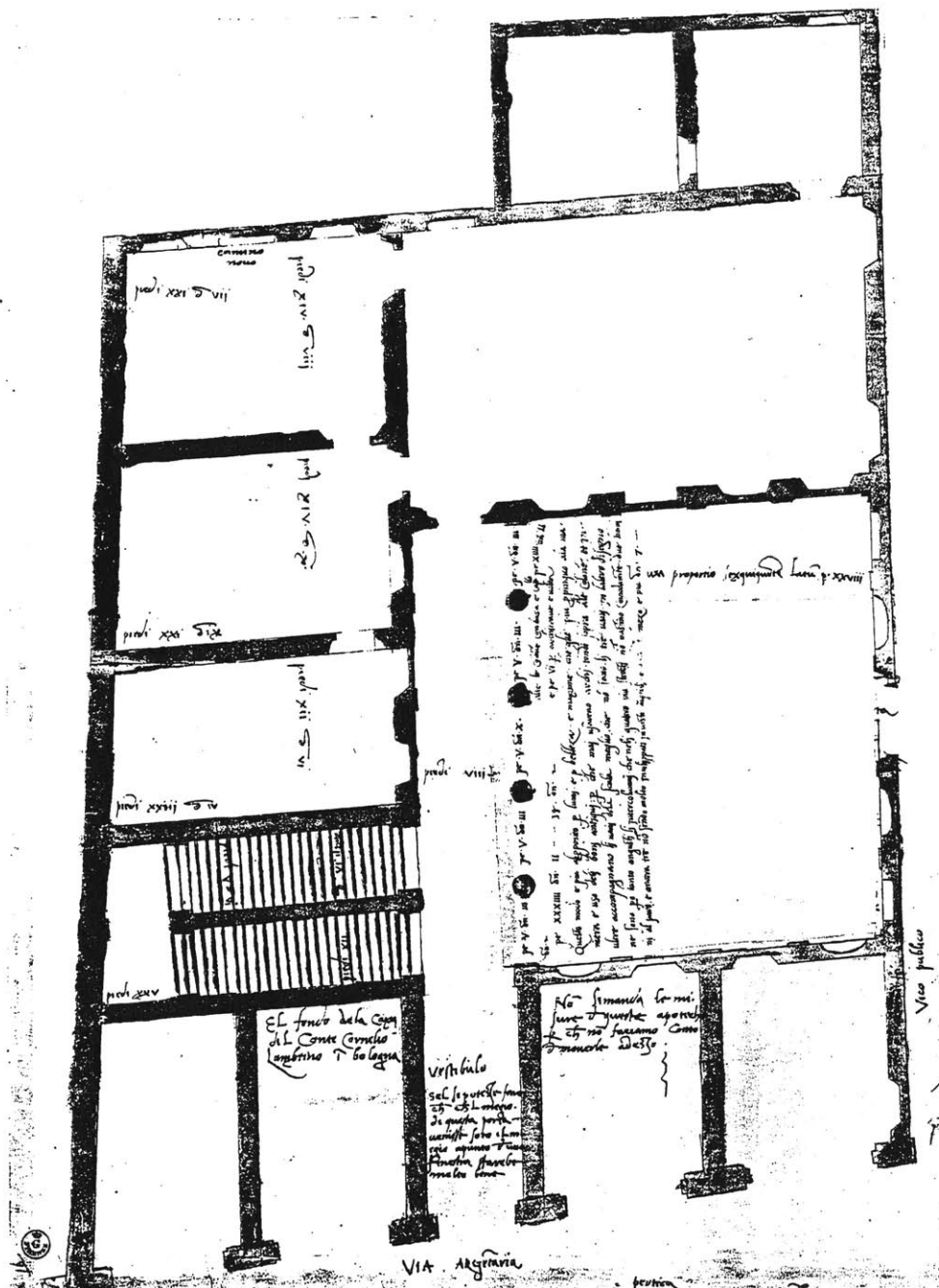
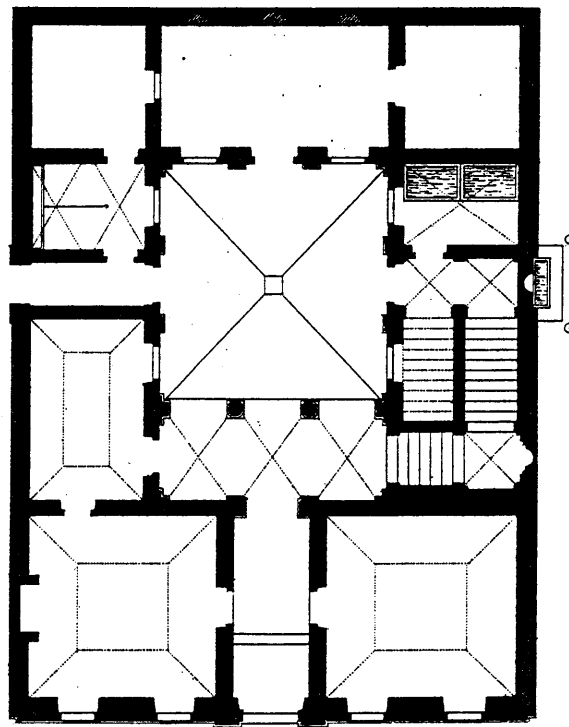


Fig. 77 - Baldassare Peruzzi: plan for Palazzo Lamberini in Bologna (Uffizi 352r)



Plan.

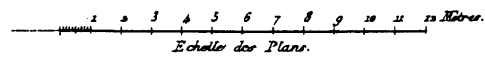


Fig. 78 - Palazzo Ossoli: plan of ground floor (from Letarouilly)

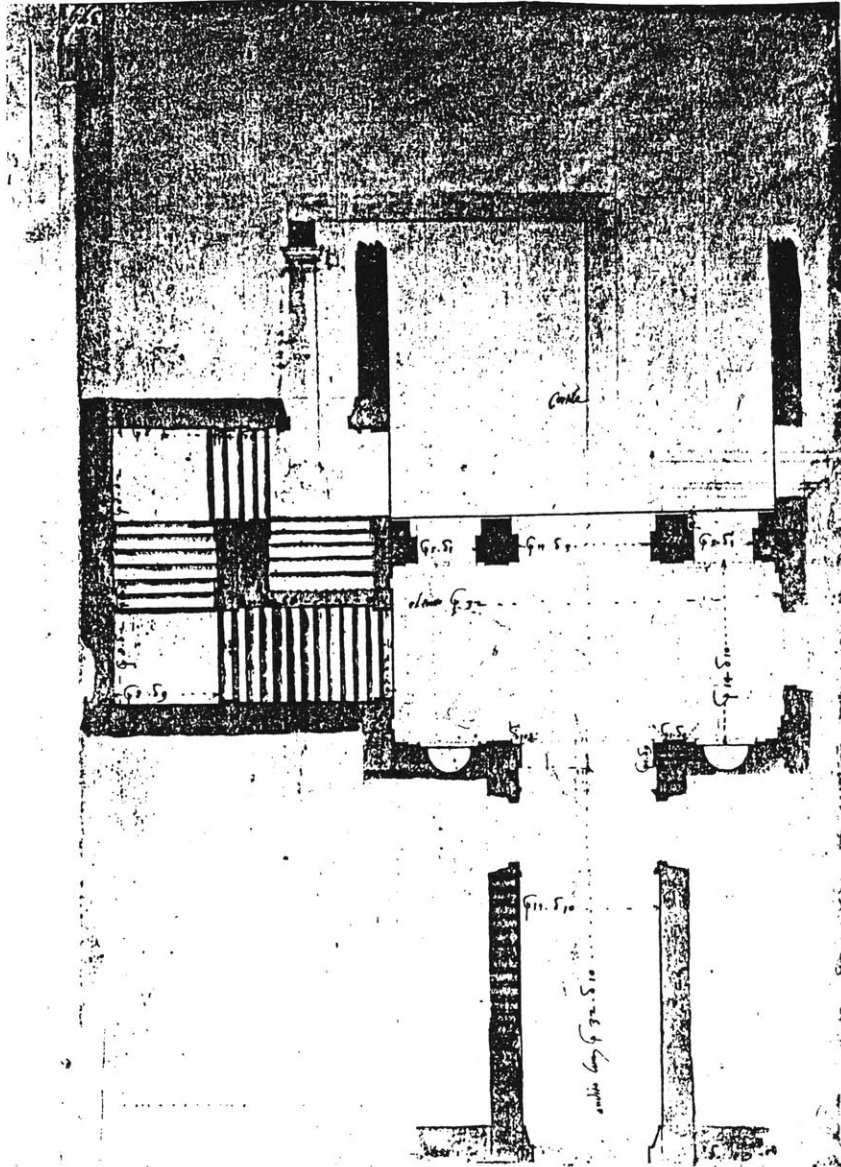


Fig. 79 - G. A. Dosio: plan of androne, loggia and staircase of Palazzo Fusconi-Pighini (Uffizi 379v)



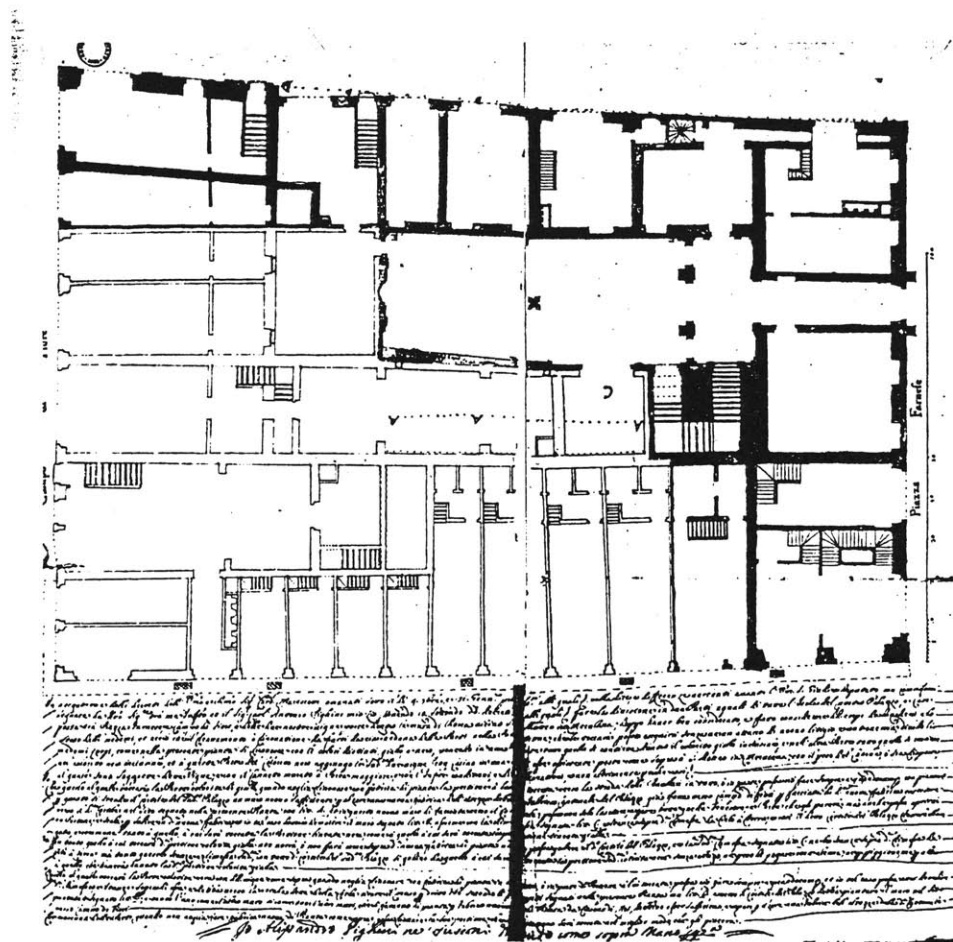


Fig. 80 - Plan of Palazzo Fusconi-Pighini and surrounding property in 1705  
(from Repetto)







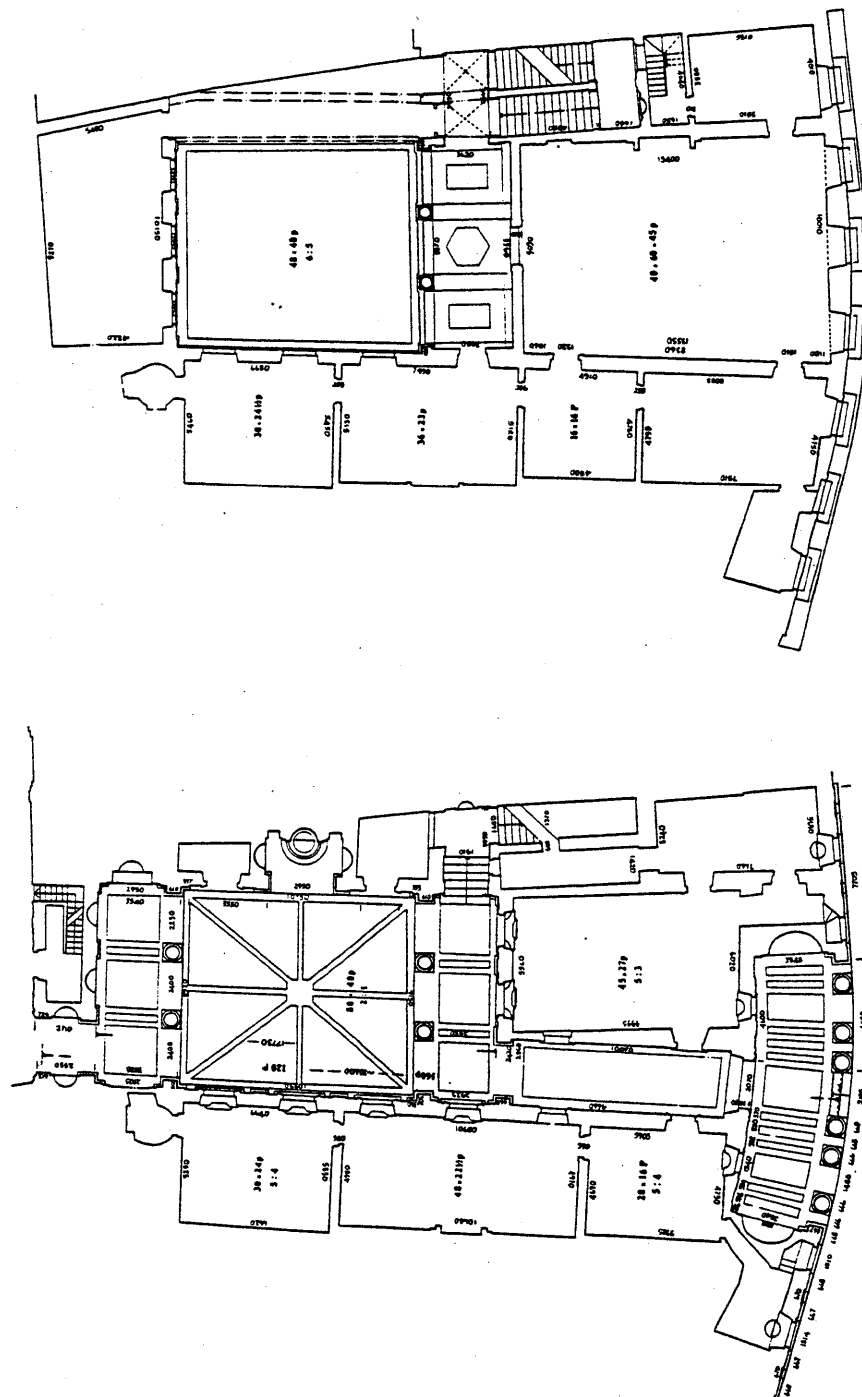


Fig. 83 - Palazzo Pietro Massimo: plans of ground floor and piano nobile (from Wilson Jones)

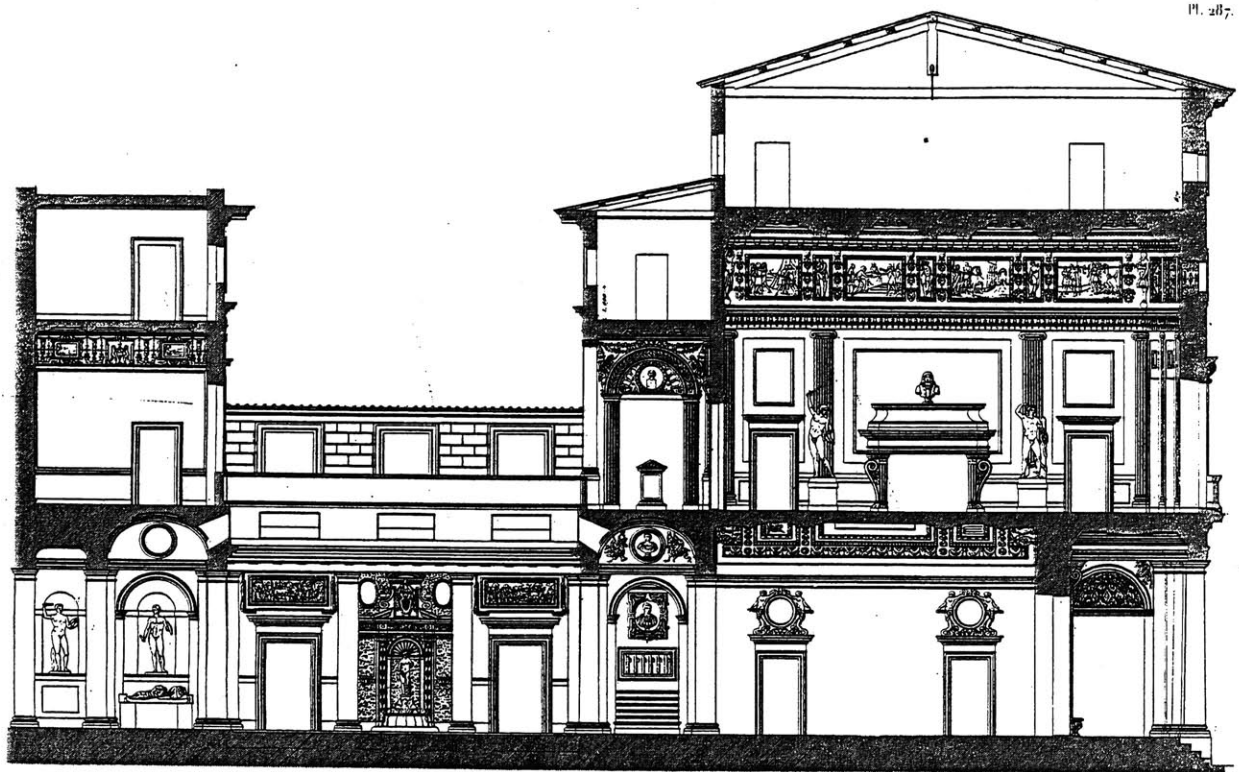


Fig. 84 - Palazzo Pietro Massimo: section (from Letarouilly)



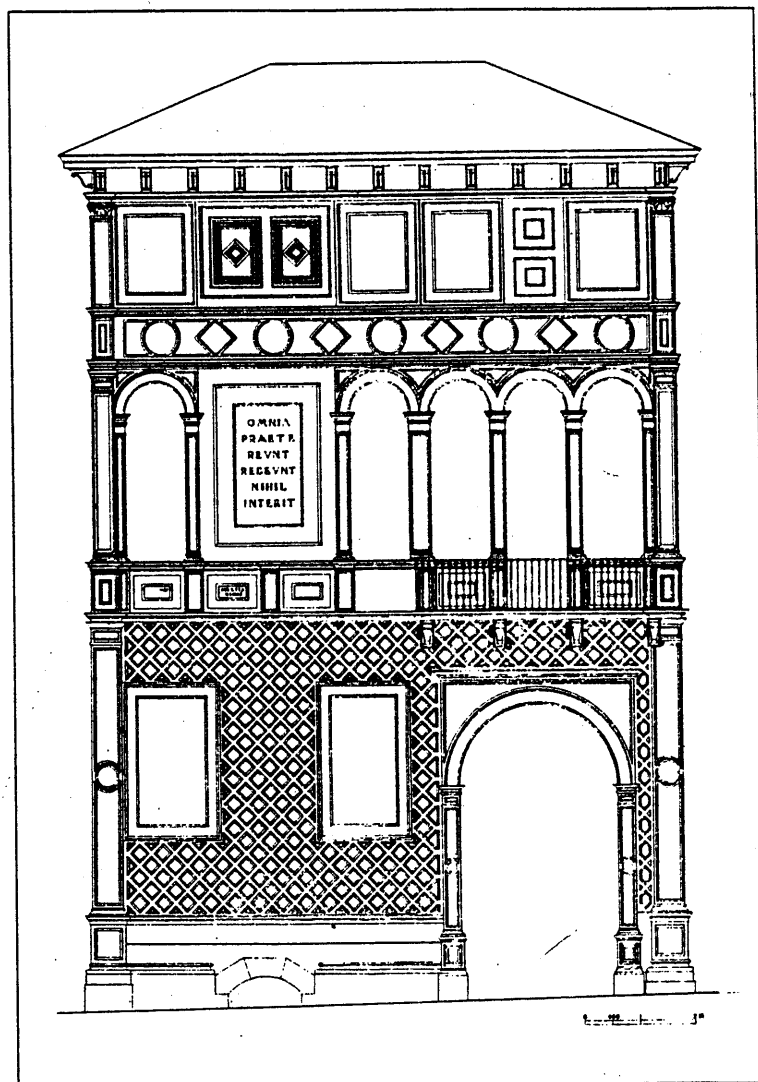


Fig. 86 - Palazzo Arnaldi-Piccoli (Vicenza, late 15th century): facade (from Cevese)

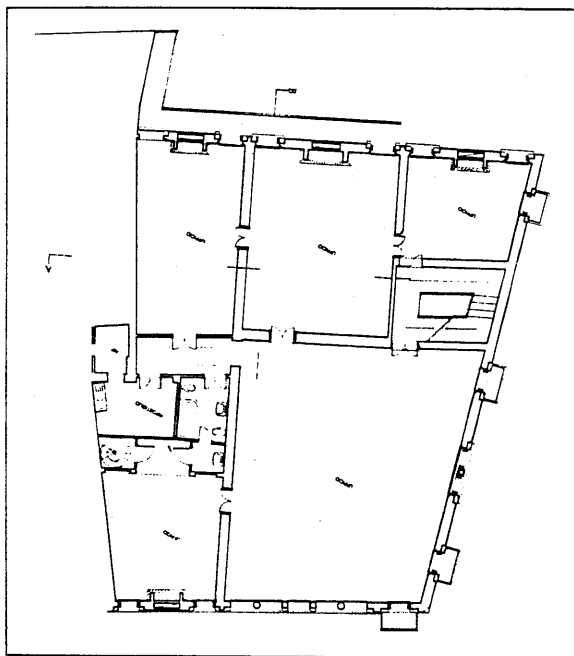
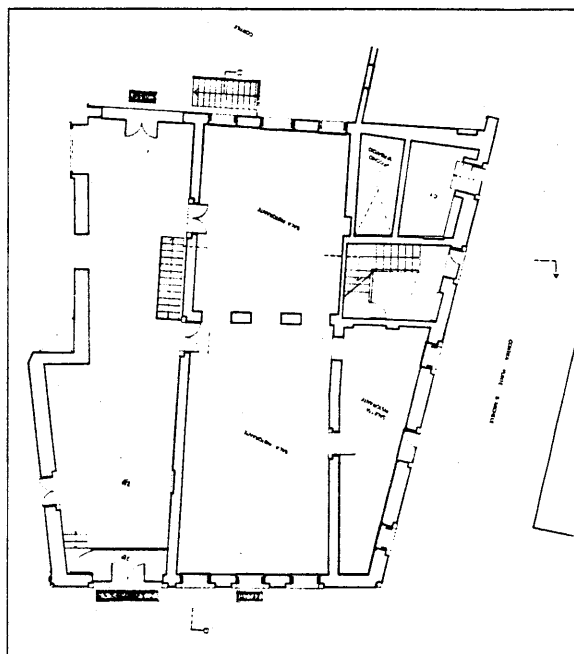
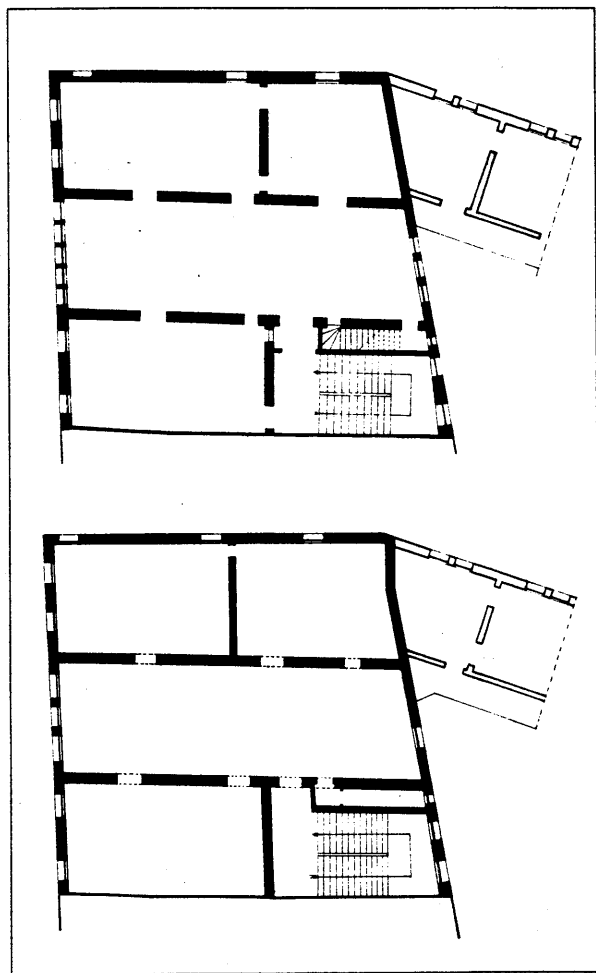


Fig. 87 - Palazzo Bessarione (Padua, c. 1490): plans of first mezzanine and piano nobile (from Cevese)

Fig. 88 - Palazzo Garzadori (Vicenza, late 15th century): plans of ground floor and piano nobile (from Cevese)

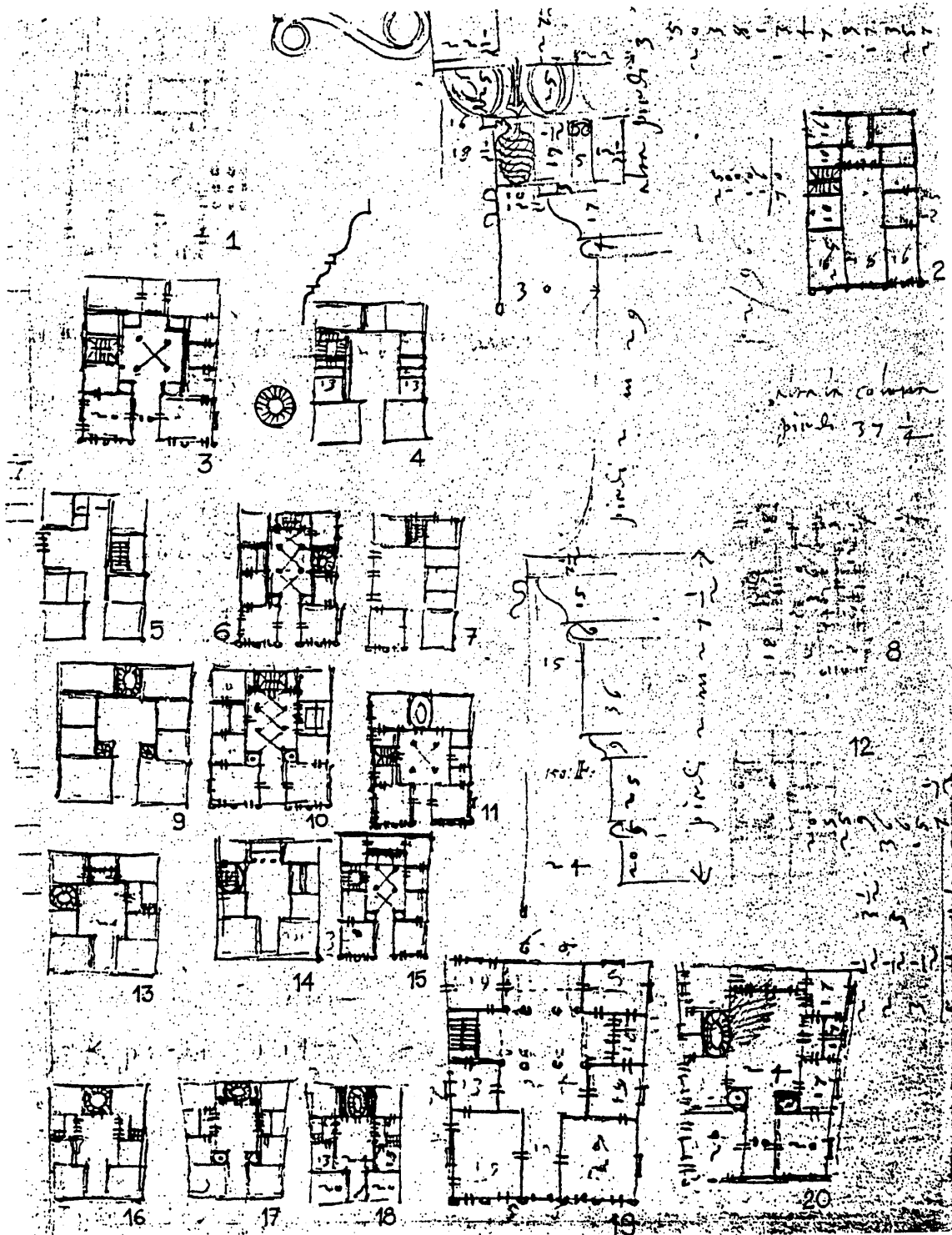
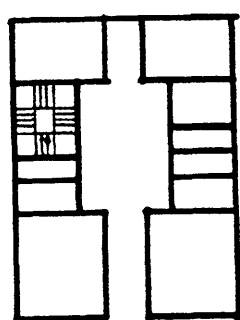
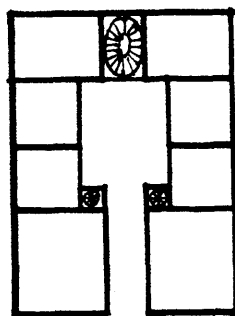


Fig. 89 - Palladio: plan sketches for a palace (RIBA XI/22v)

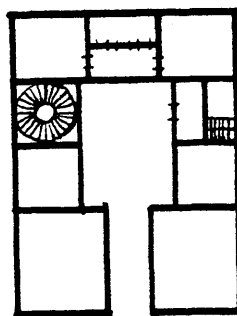




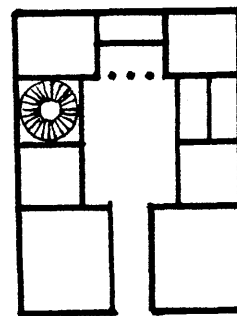
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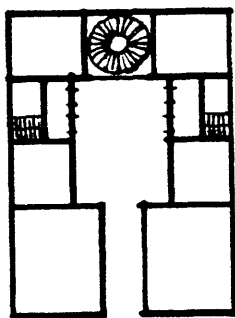
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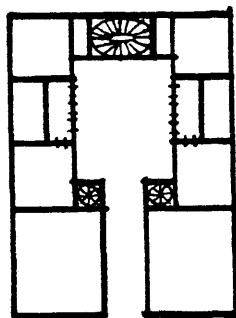
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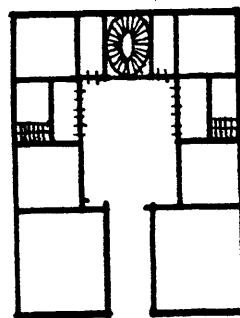
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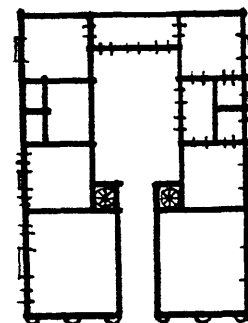
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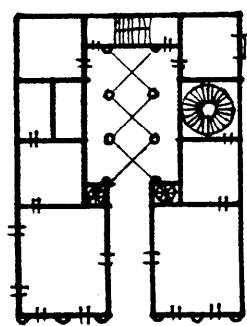


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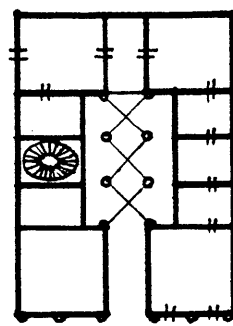


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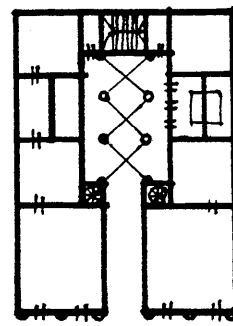
Fig. 90 - Plan sketches from RIBA XI/22v.



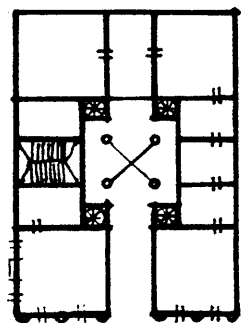
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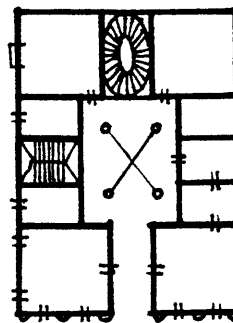
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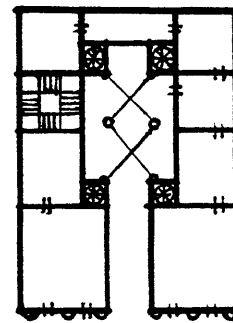
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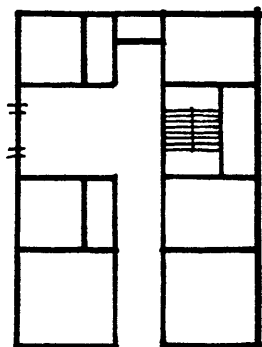


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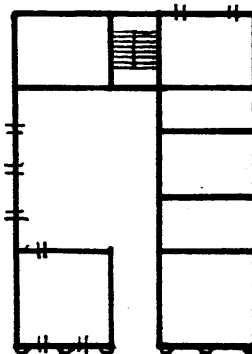


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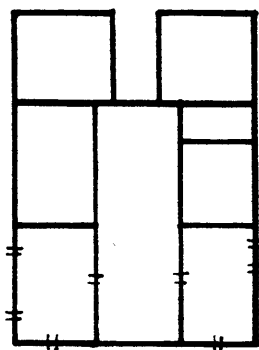
Fig. 91 - Plan sketches from RIBA XI/22v.



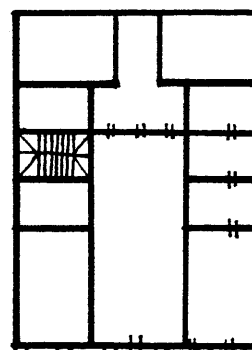
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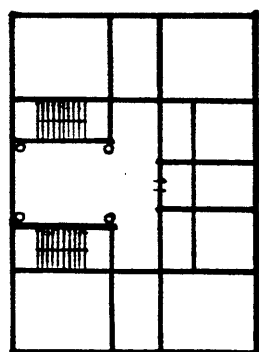
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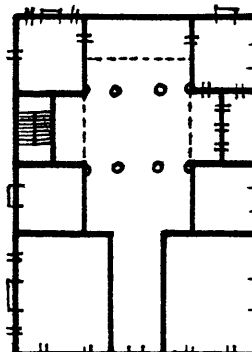
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2



12



19

Fig. 92 - Plan sketches from RIBA XI/22v.

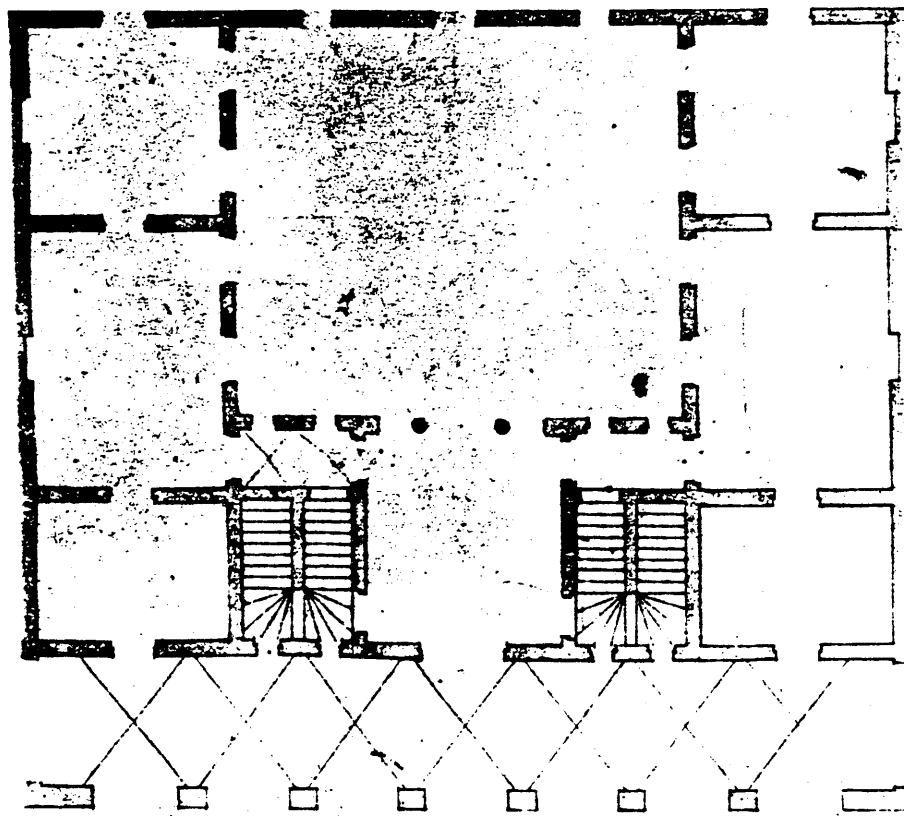


Fig. 93 - Andrea Palladio: plan for Palazzo Civena (RIBA XVI/17)

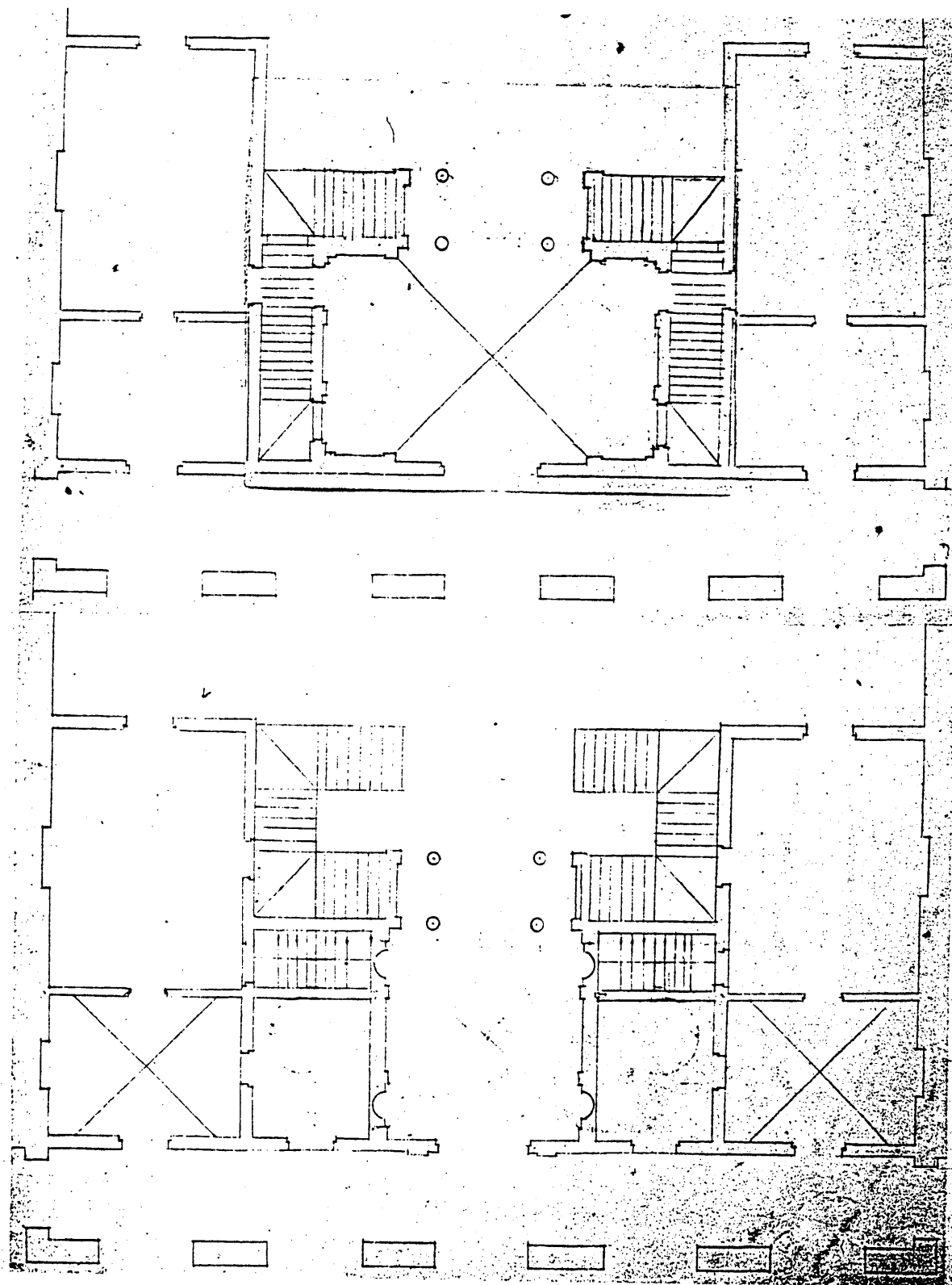


Fig. 94 - Andrea Palladio: plans for Palazzo Civena (RIBA XVI/11)

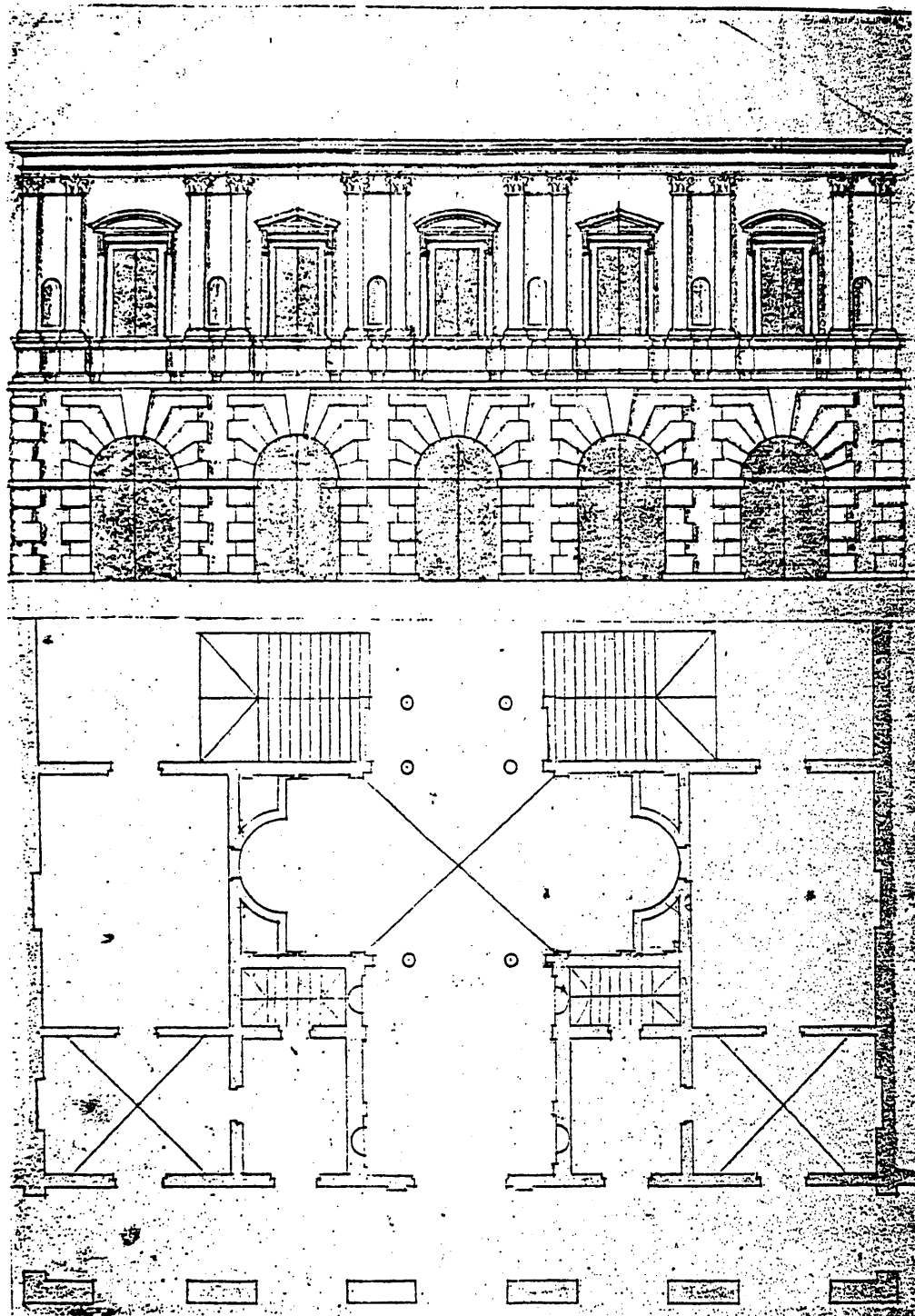


Fig. 95 - Andrea Palladio: facade and plan for Palazzo Civena (RIBA XVII/14)

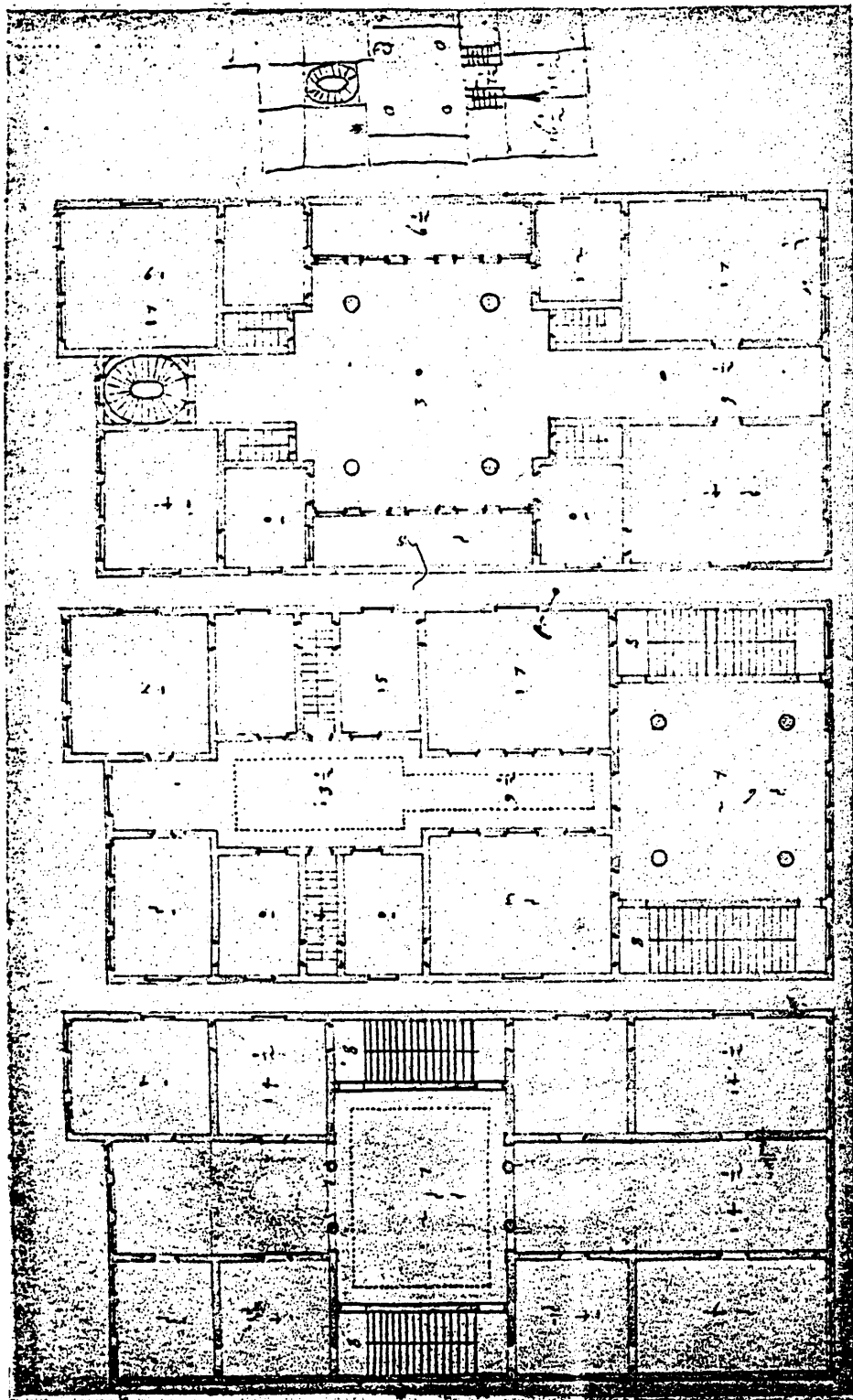


Fig. 96 - Andrea Palladio: alternative plans for a palace (RIBA XVI/9r)

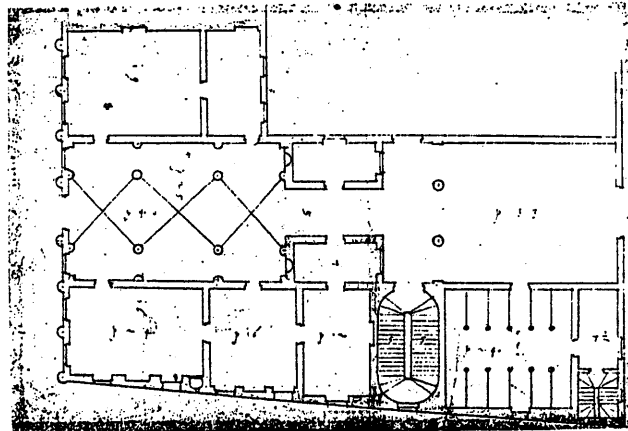
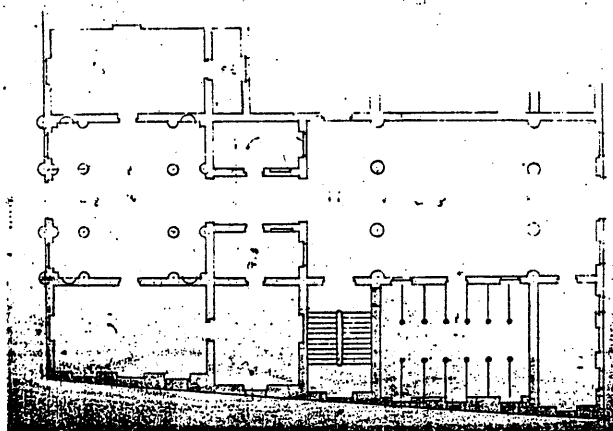
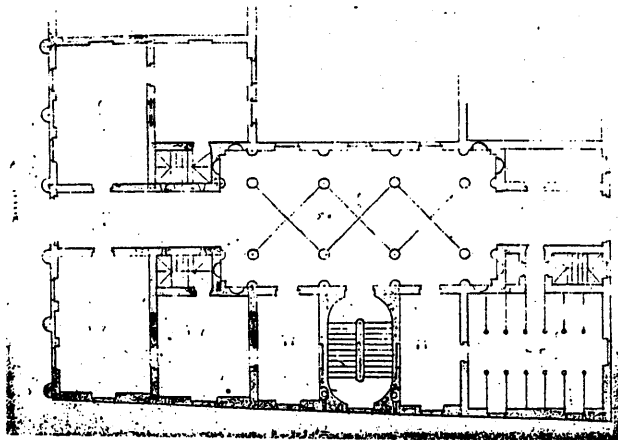


Fig. 97 - Andrea Palladio: three alternative plans for Palazzo Barbarano (RIBA XVI/14 A, B and C)



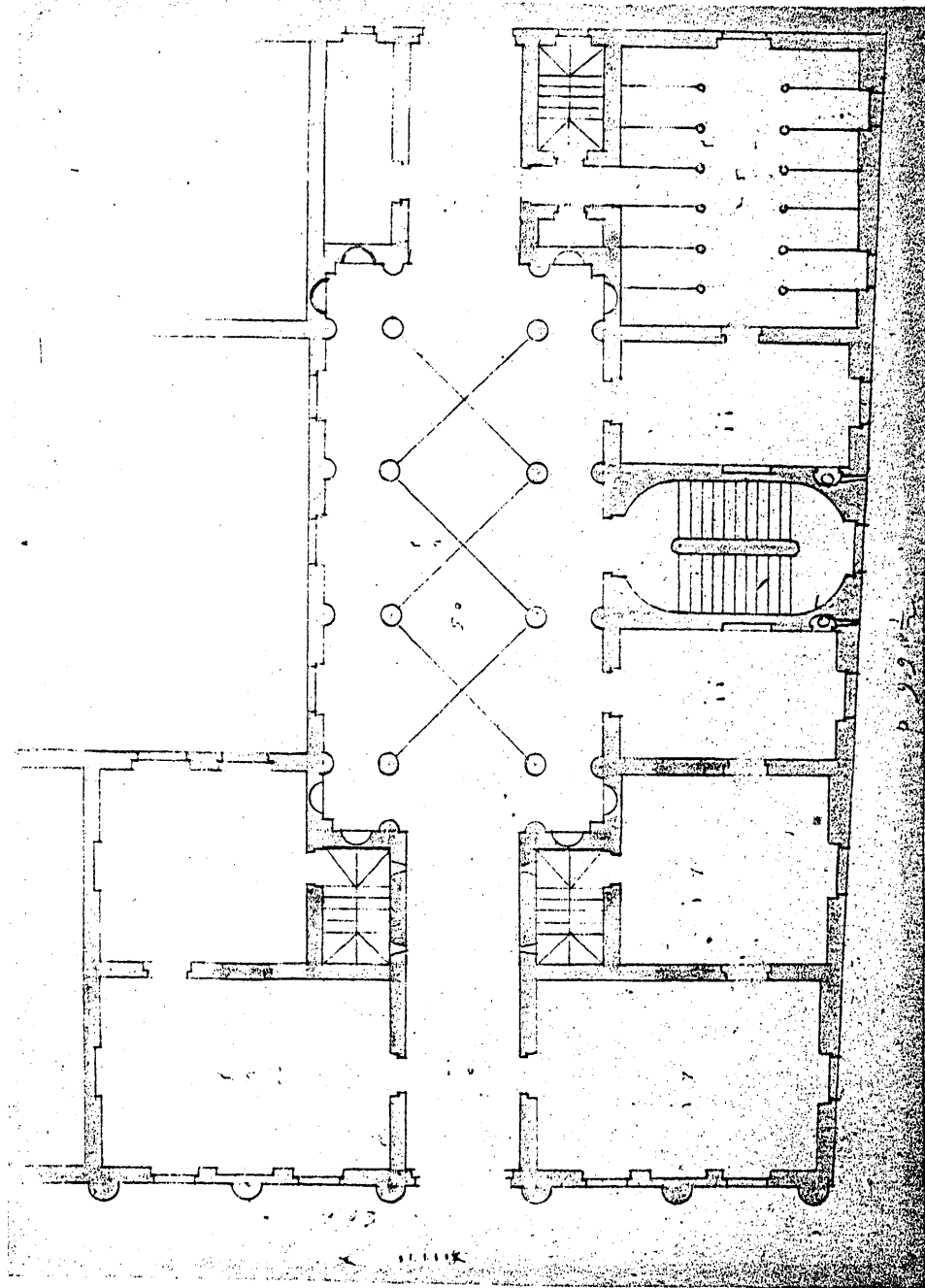


Fig. 98 - Andrea Palladio: alternative "A" for Palazzo Barbarano (RIBA XVI/14 A)

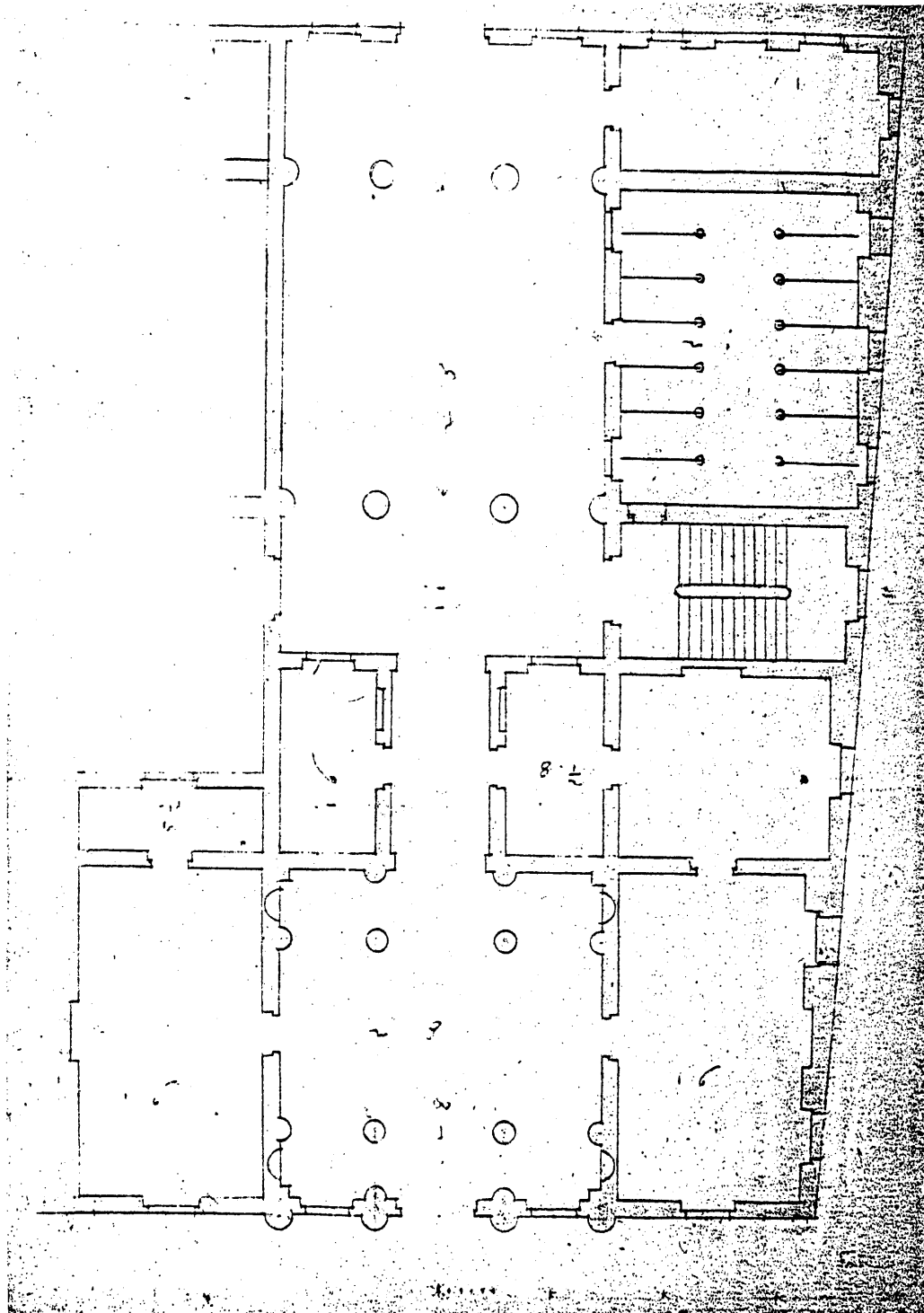


Fig. 99 - Andrea Palladio: alternative "B" for Palazzo Barbarano (RIBA XVI/14 B)

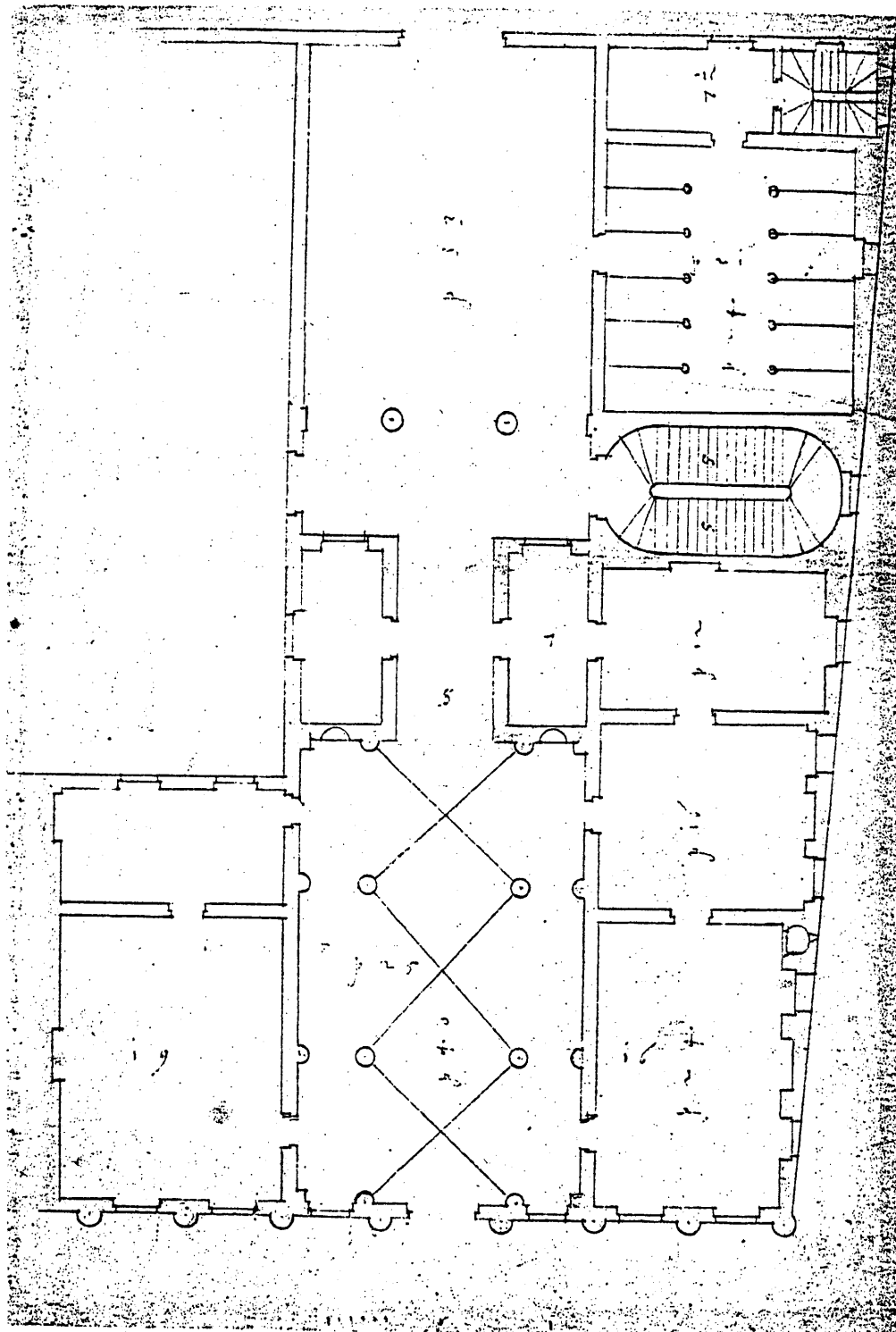


Fig. 100 - Andrea Palladio: alternative "C" for Palazzo Barbarano  
(RIBA XVI/14 C)

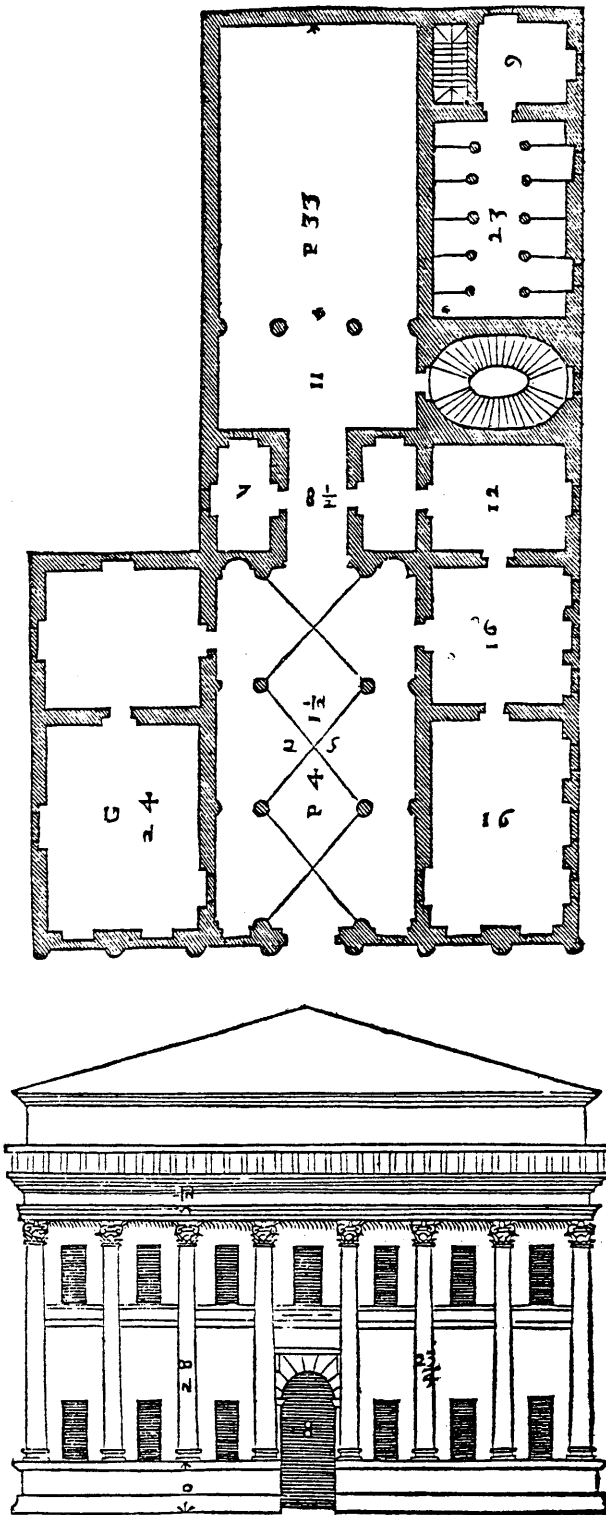


Fig. 101 - Andrea Palladio: plan and facade for the Palazzo Barbarano (from "Quattro Libri")

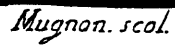
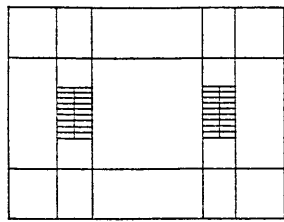
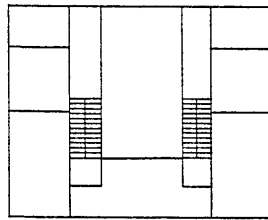


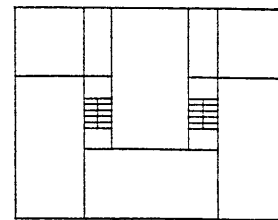
Fig. 102 - Palazzo Barbarano: plan as built (from Bertotti-Scamozzi)



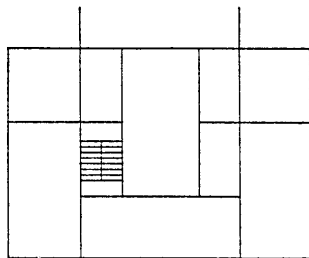
Villa Thiene at Cicogna



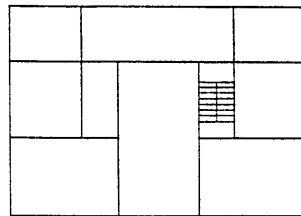
Villa Sarego at Miega



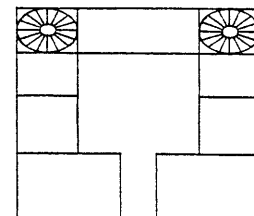
Villa Poiana at  
Poiana Maggiore



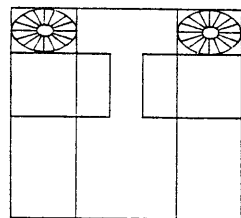
Villa Badoer at Fratta,  
Polesine



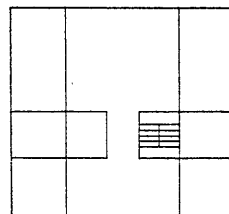
Villa Zeno at Cessalto



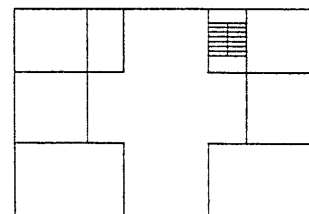
Villa Cornaro at  
Piombino Dese



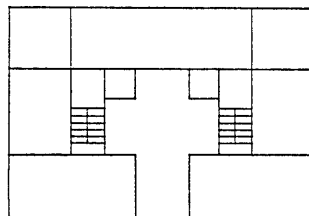
Villa Pisani at Monatagnana



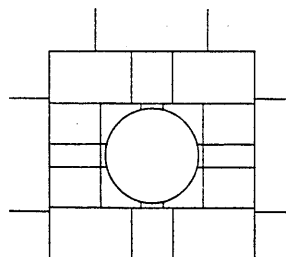
Villa Emo at  
Fanzolo



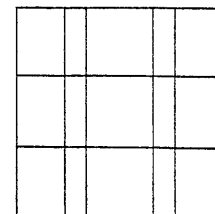
Villa Malcontenta  
at Mira



Villa Pisani at  
Bagnolo



Villa Rotonda  
near Vicenza



Geometrical Pattern  
of Palladio's Villas

Fig. 103 - Wittkower: plan schemes of Palladio's villas (from Wittkower)

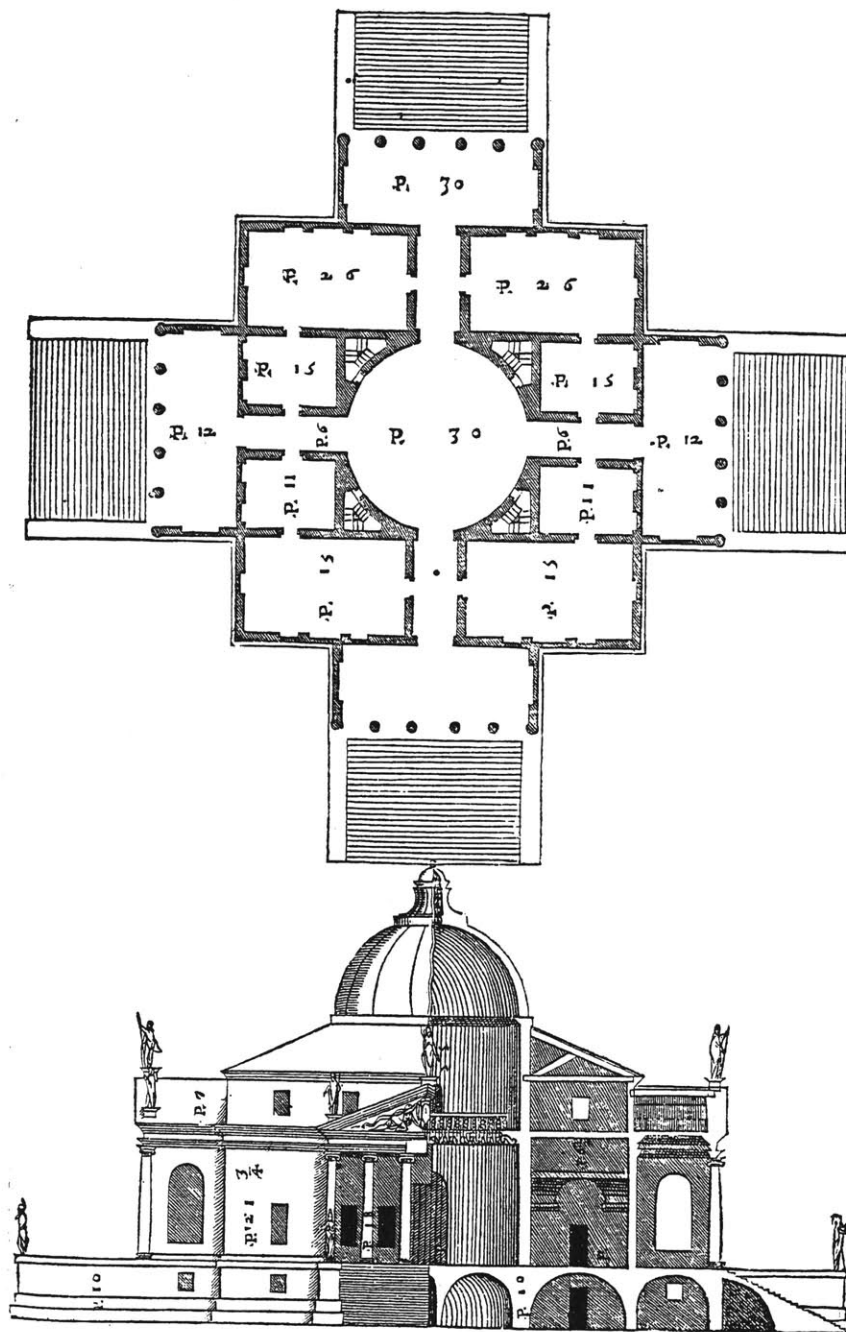


Fig. 104 - Andrea Palladio: plan and section of Villa Capra (from "Quattro Libri")

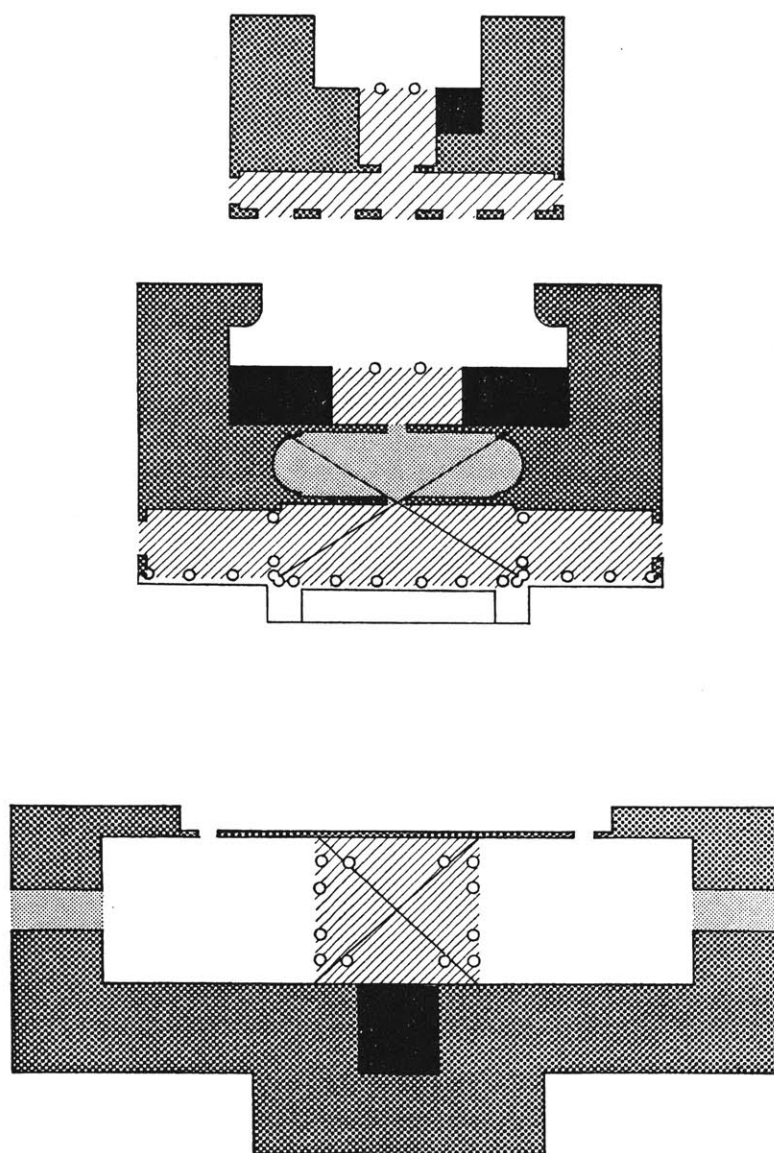


Fig. 105 - Plan type "A" (Palladio): palazzi Civena, Chiericati, Della Torre  
(from Carboneri)



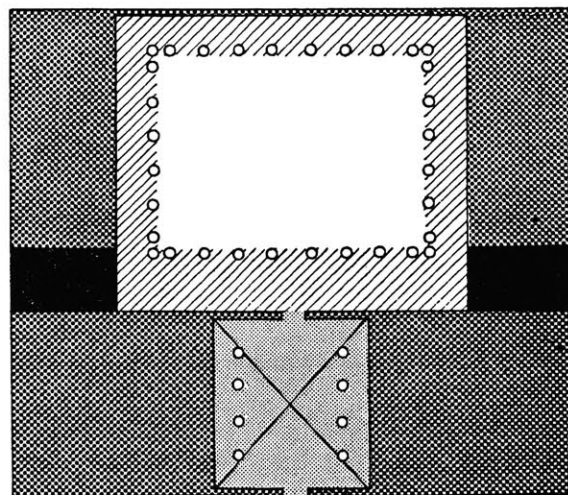
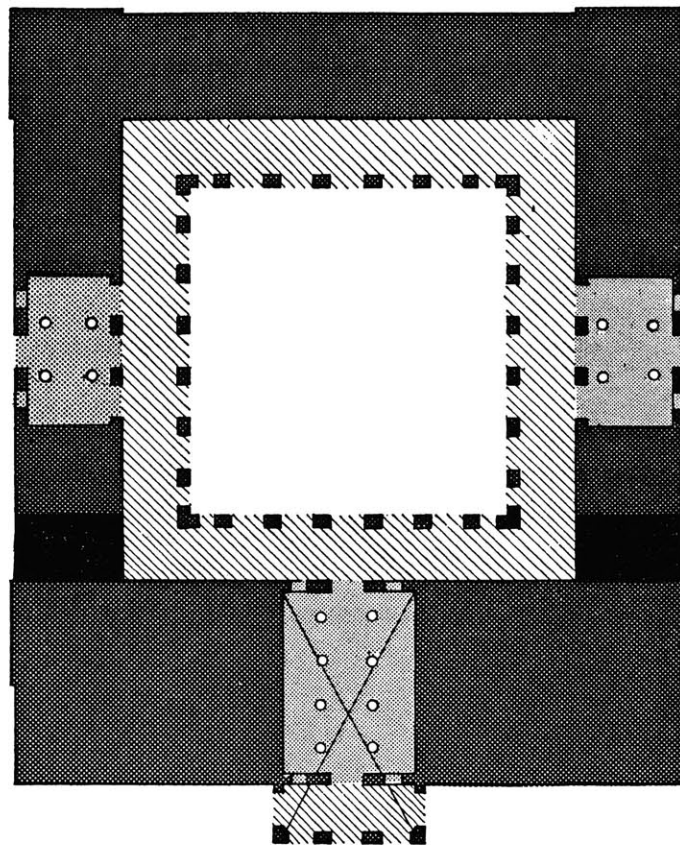


Fig. 106 - Plan type "B" (Palladio): palazzi Thiene, Trissino (from Carboneri)

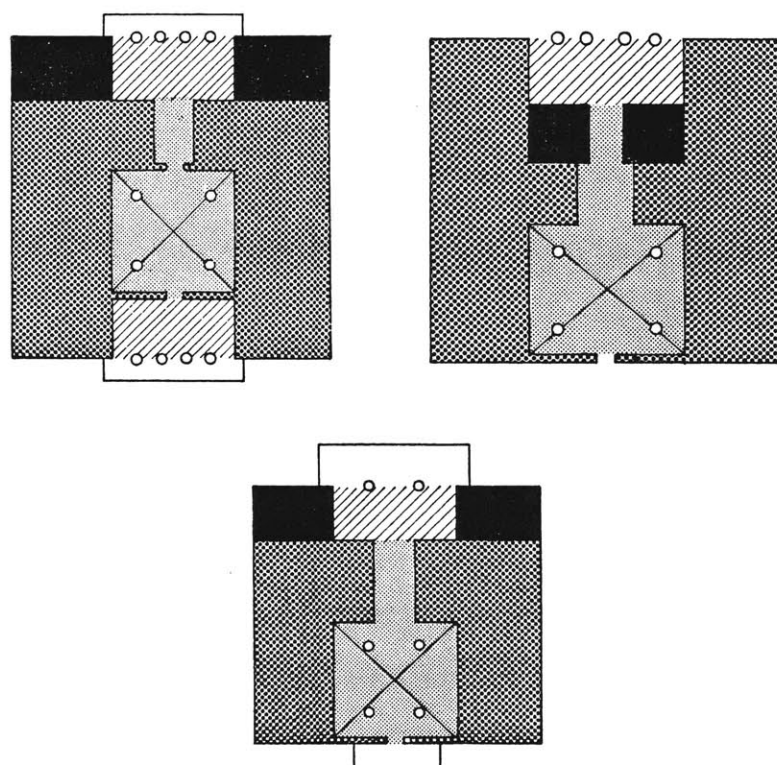


Fig. 107 - Plan type "C" (Palladio): palazzi Garzadori, Antonini, Pisani (from Carboneri)

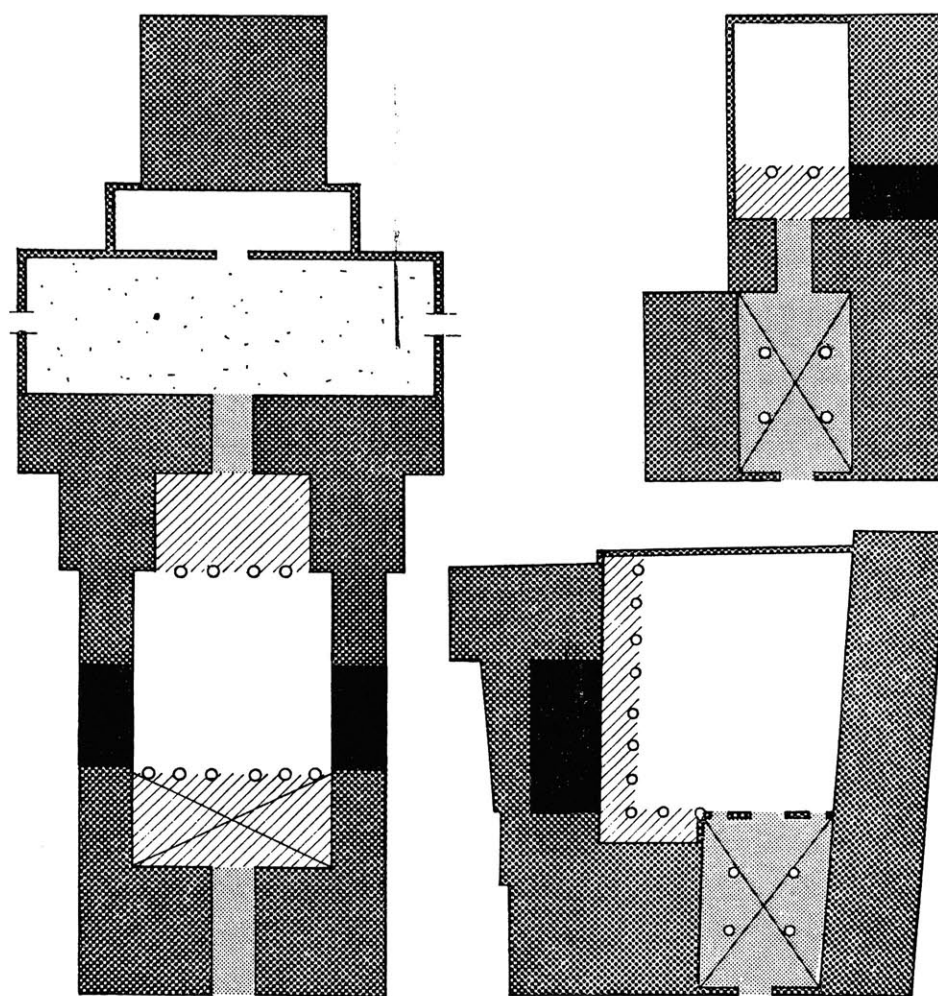


Fig. 108 - Plan type "D" (Palladio): palazzi Porto-Festa, Barbarano  
(original and revised projects; from Carboneri)

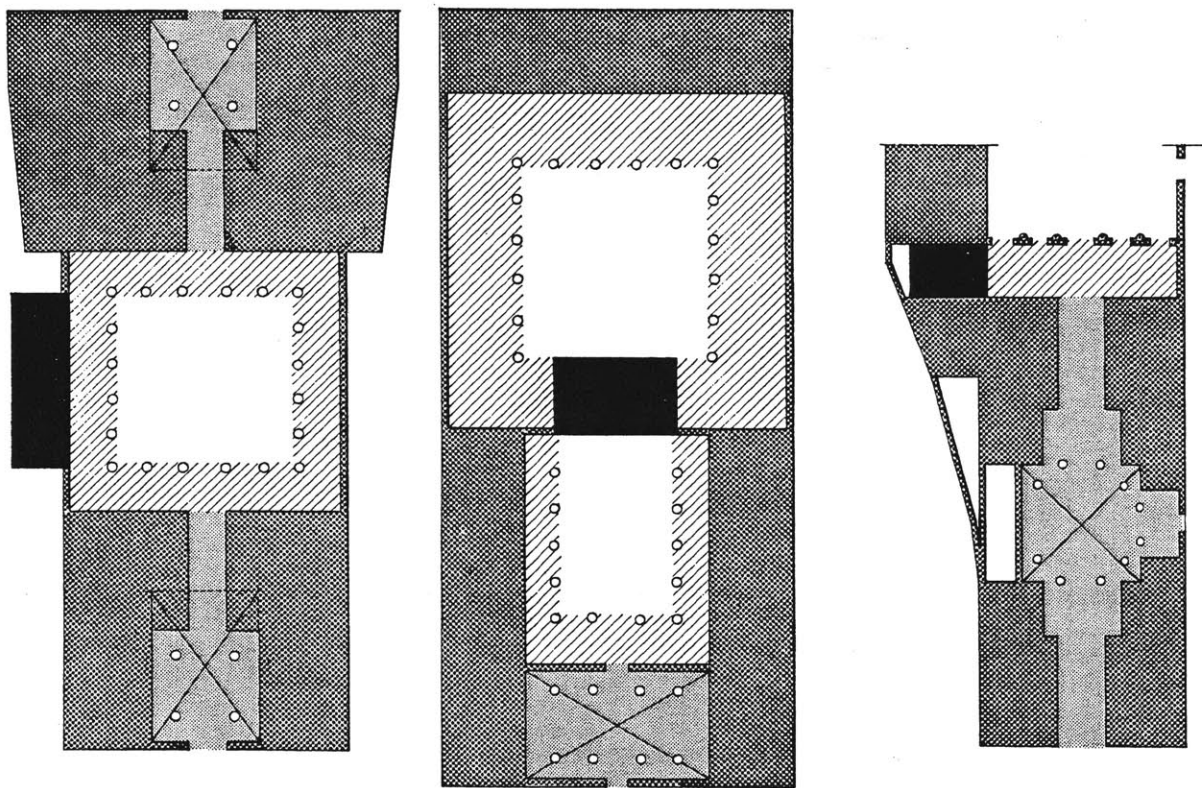


Fig. 109 - Plan type "D" (Palladio): palazzi Valmarana, Angarano (from Carboneri)

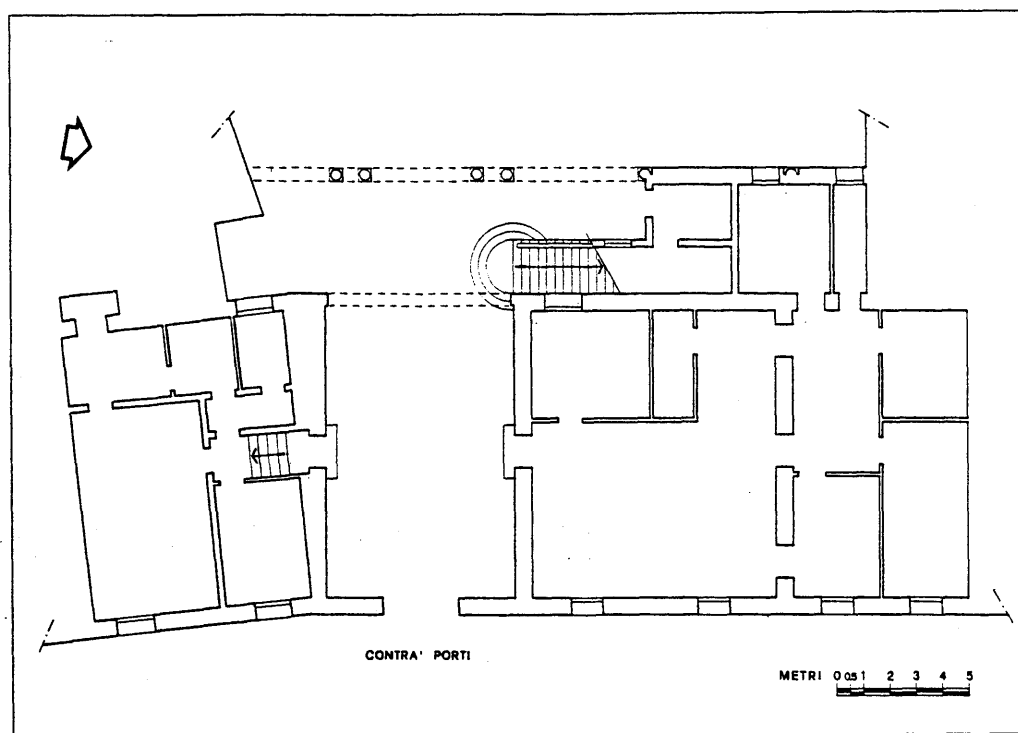
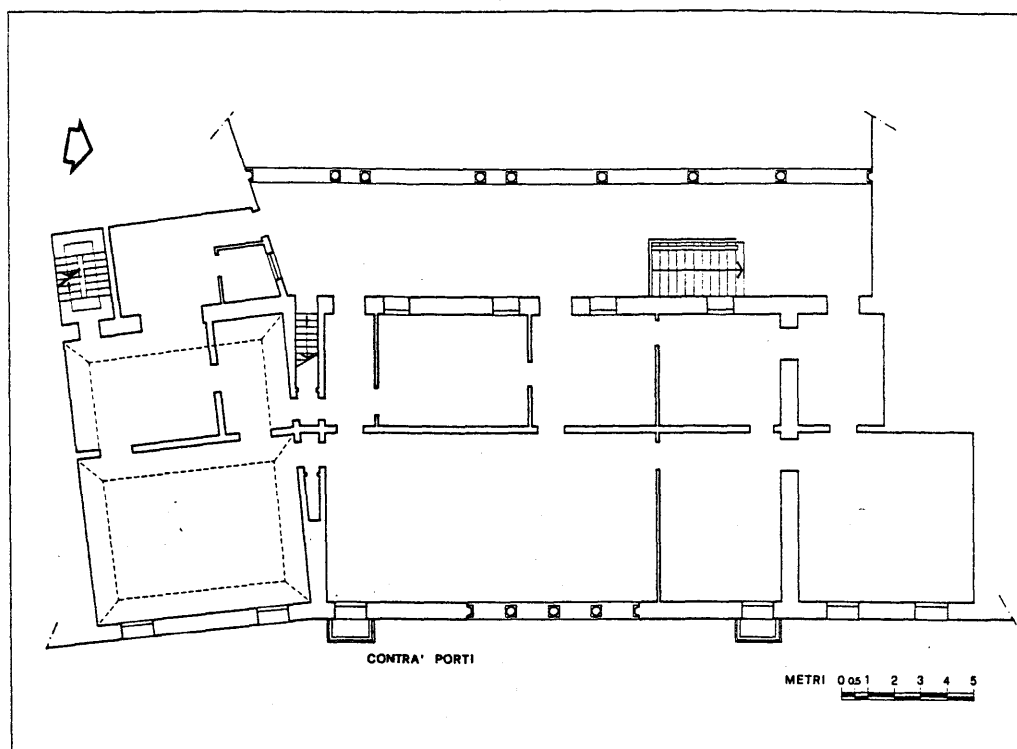


Fig. 110 - Ca' Grande in Contra' Porti, Vicenza: plans of piano nobile and ground floor (from Morresi)

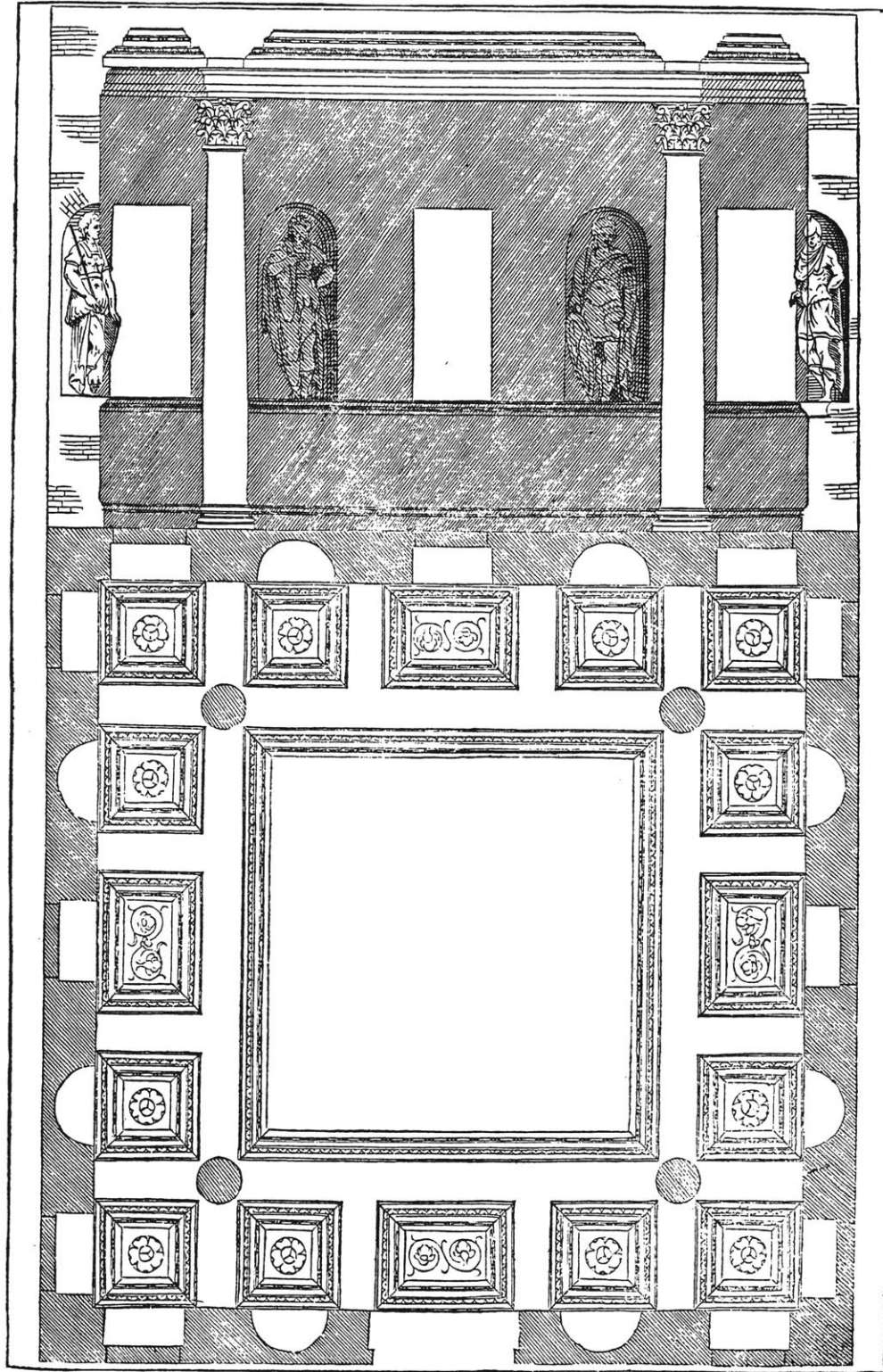


Fig. 111 - Andrea Palladio: hall with four columns (from "Quattro Libri")

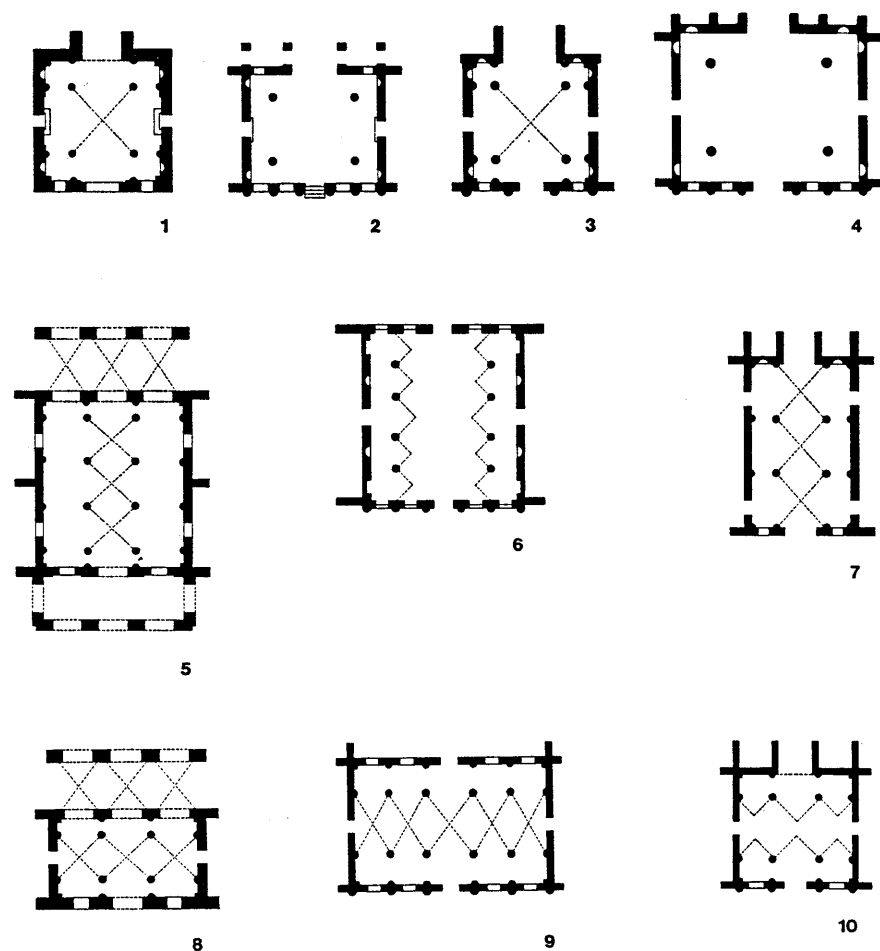


Fig. X - ENTRATE DI PALAZZI PALLADIANI: 1) Da Porto Festa; 2) Antonini; 3) «in situ piramidale»; 4) «per Venezia»; 5) Thiene (ingresso principale); 6) Trissino; 7) Barbaran Da Porto; 8) Thiene (ingressi laterali); 9) Angarano; 10) Pisani (scala alla figura IX, A)

Fig. 112 - Examples of Palladio's palace atriums (from Carboneri)

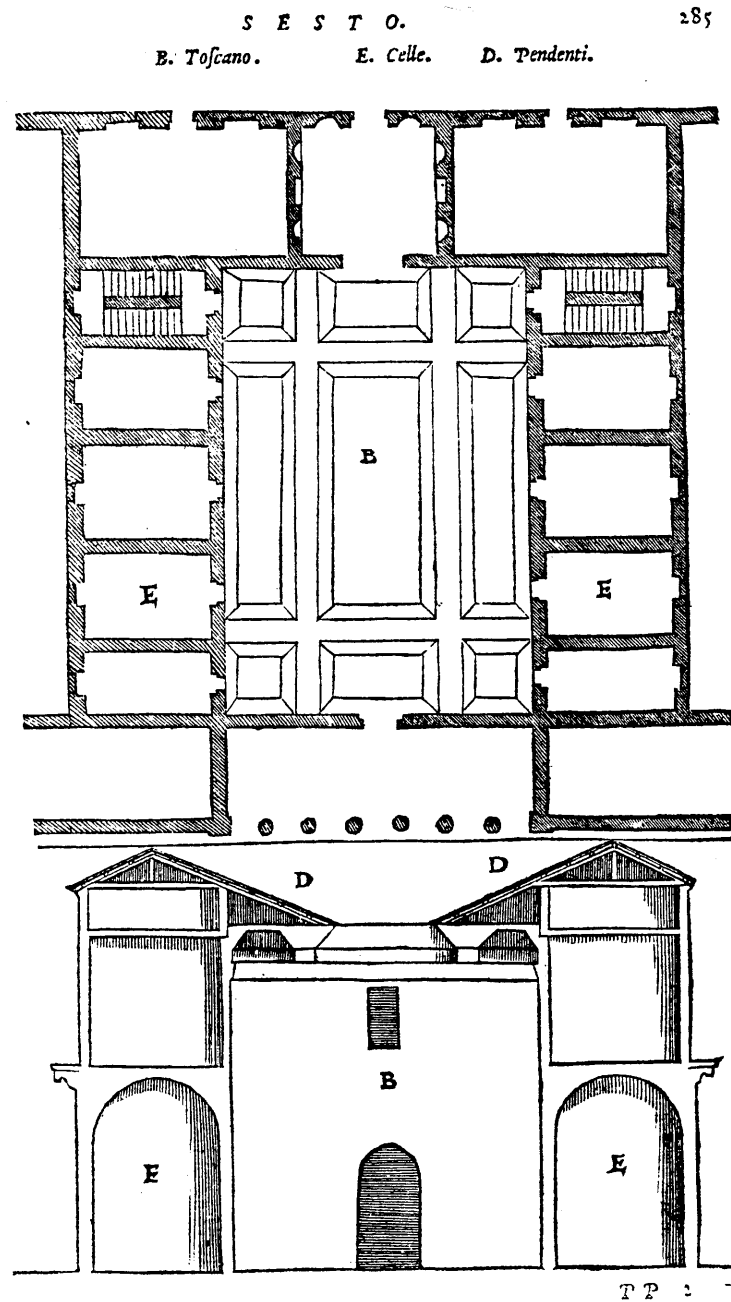


Fig. 113 - Andrea Palladio: reconstruction of Vitruvius' Tuscan atrium (from Barbaro)



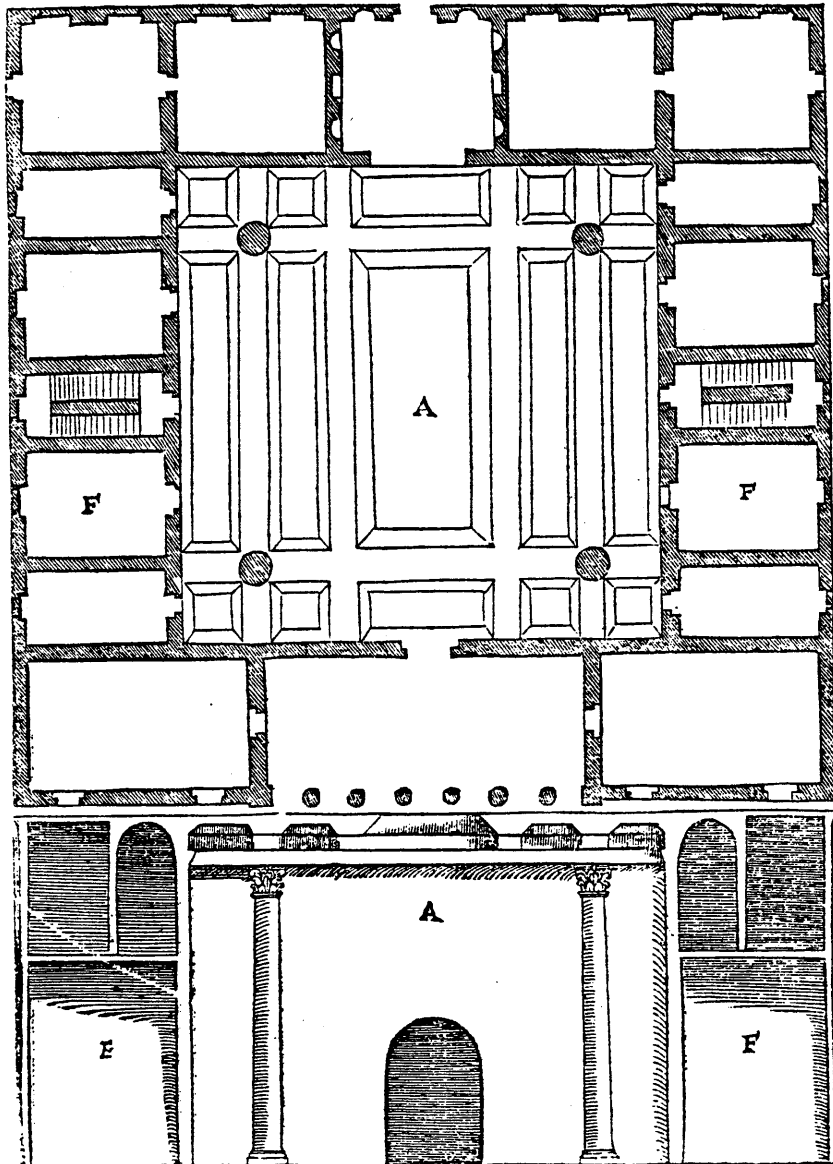


Fig. 114 - Andrea Palladio: reconstruction of Vitruvius' tetrastyle atrium (from Barbaro)

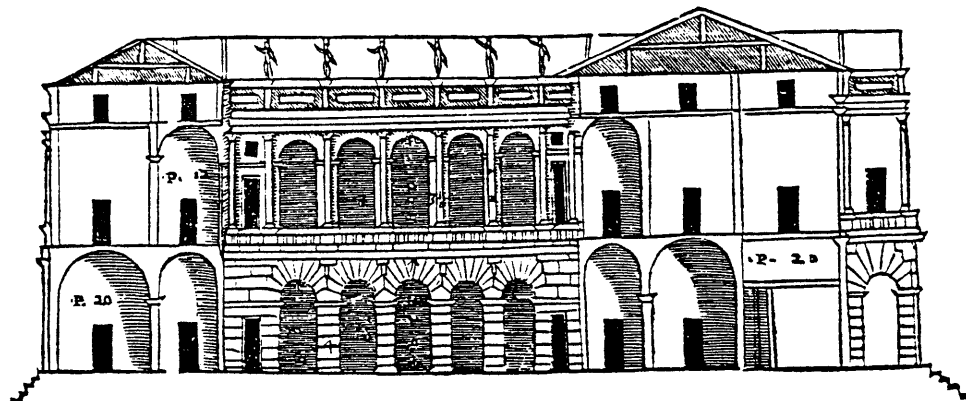
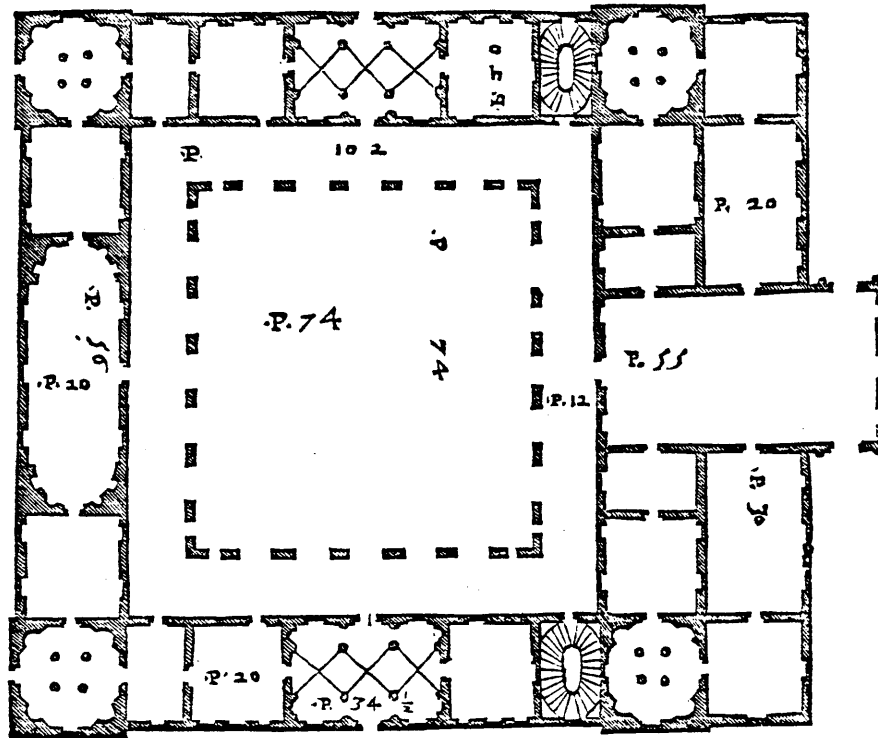


Fig. 115 - Andrea Palladio: plan and section of Palazzo Thiene (from "Quattro Libri")

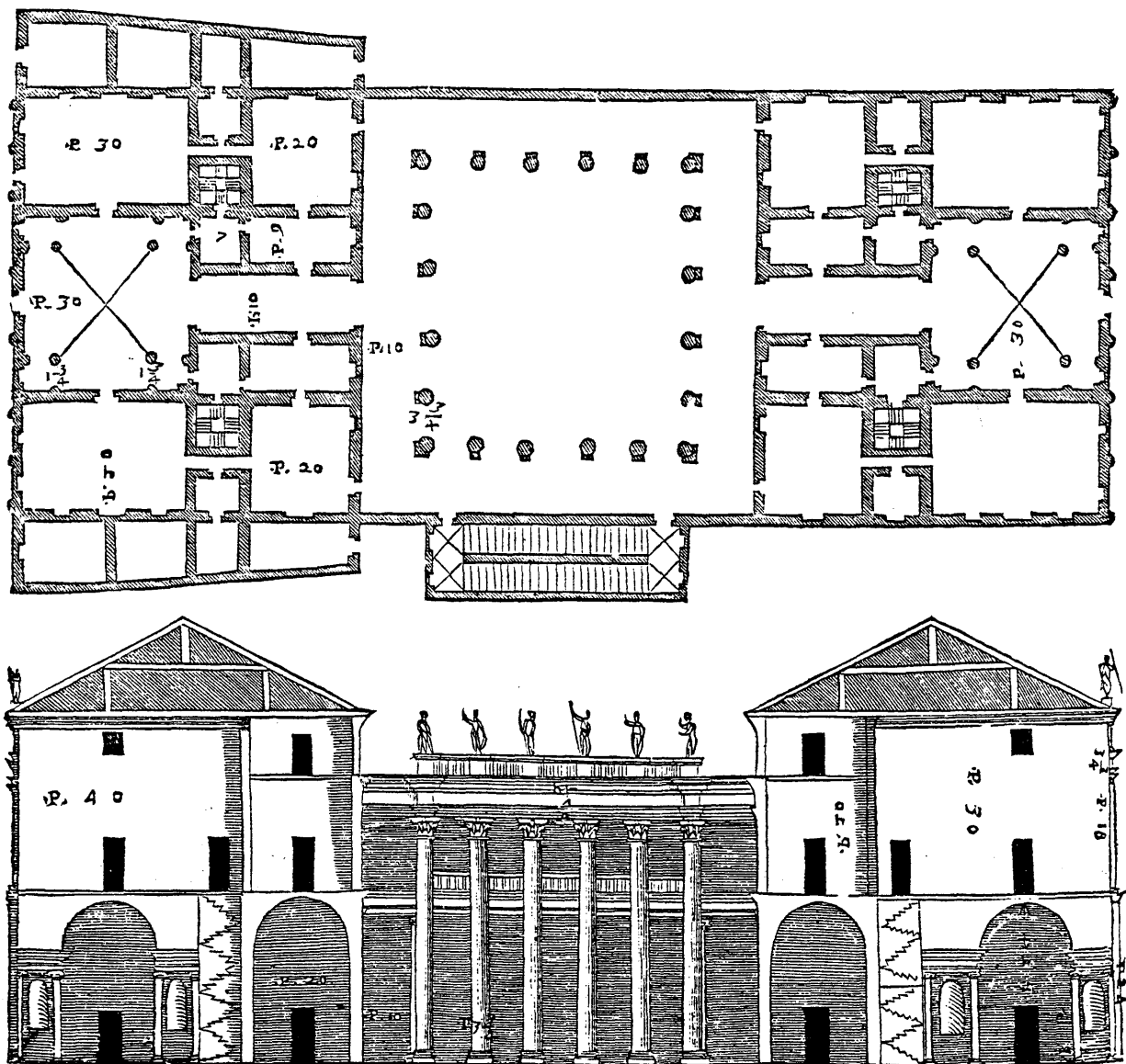


Fig. 116 - Andrea Palladio: plan and section of Palazzo Porto (from "Quattro Libri")

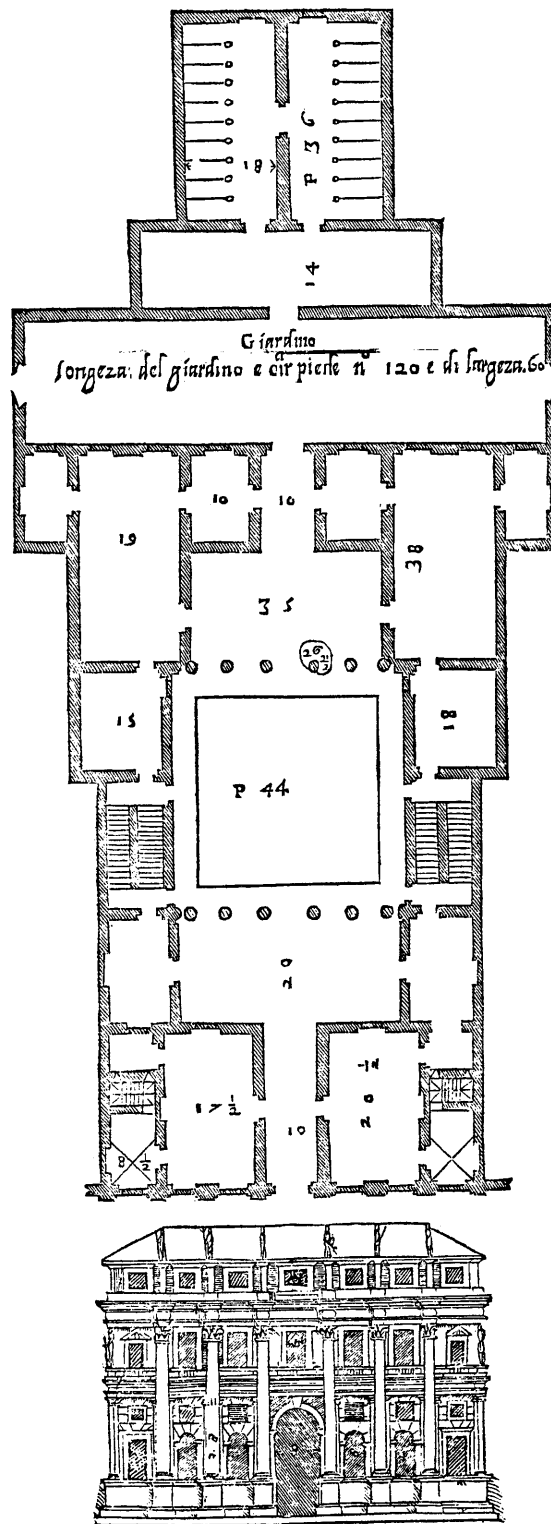


Fig. 117 - Andrea Palladio: plan and facade of Palazzo Valmarana (from “Quattro Libri”)

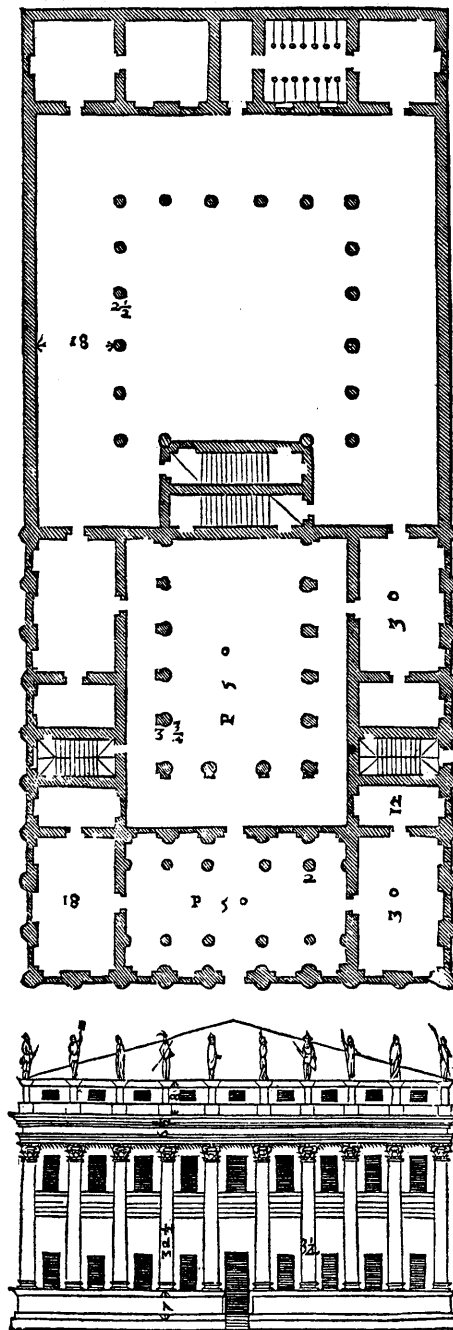


Fig. 118 - Andrea Palladio: plan and facade of Palazzo Angarano (from "Quattro Libri")

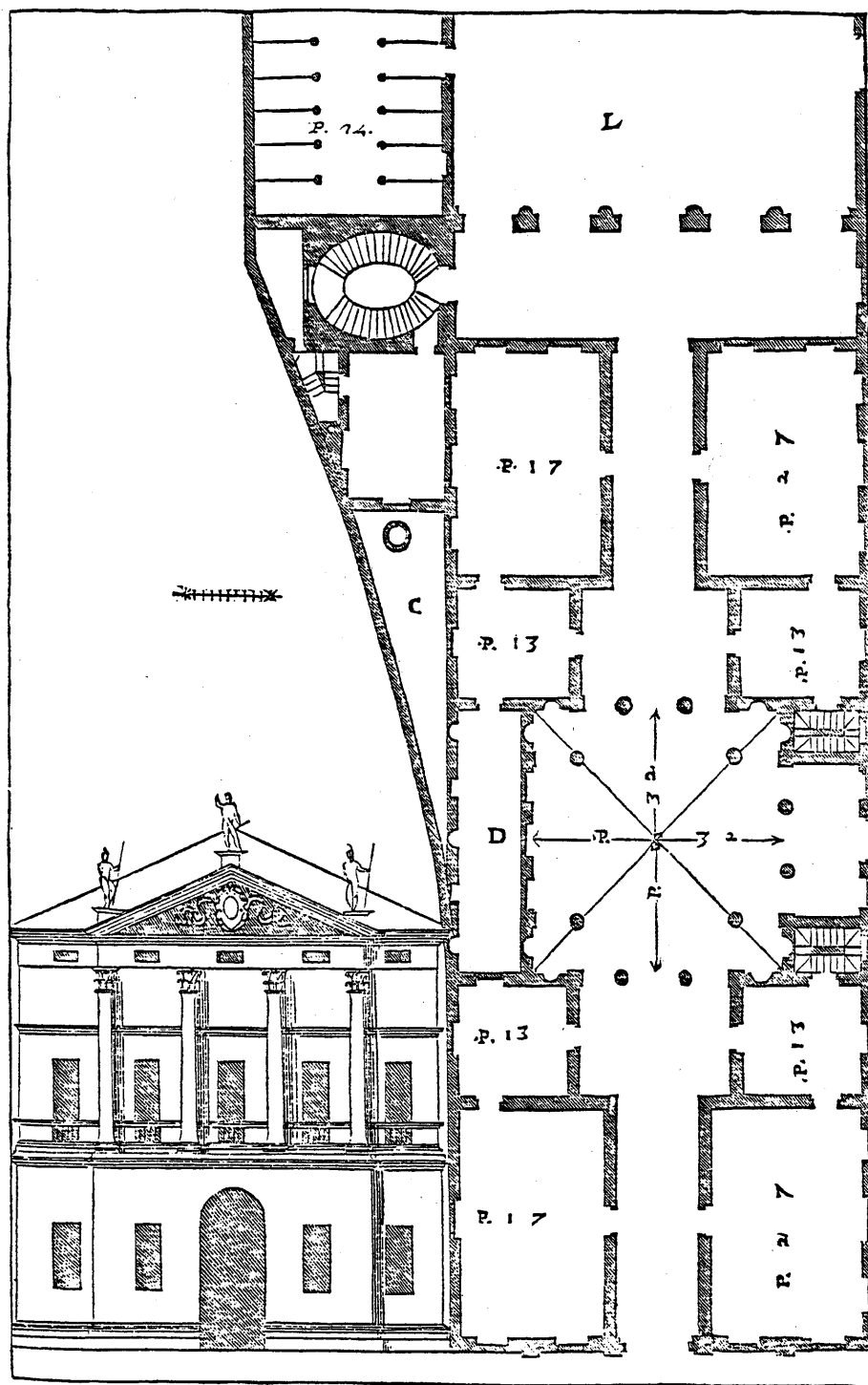


Fig. 119 - Andrea Palladio: plan and facade of Palazzo Capra (from "Quattro Libri")

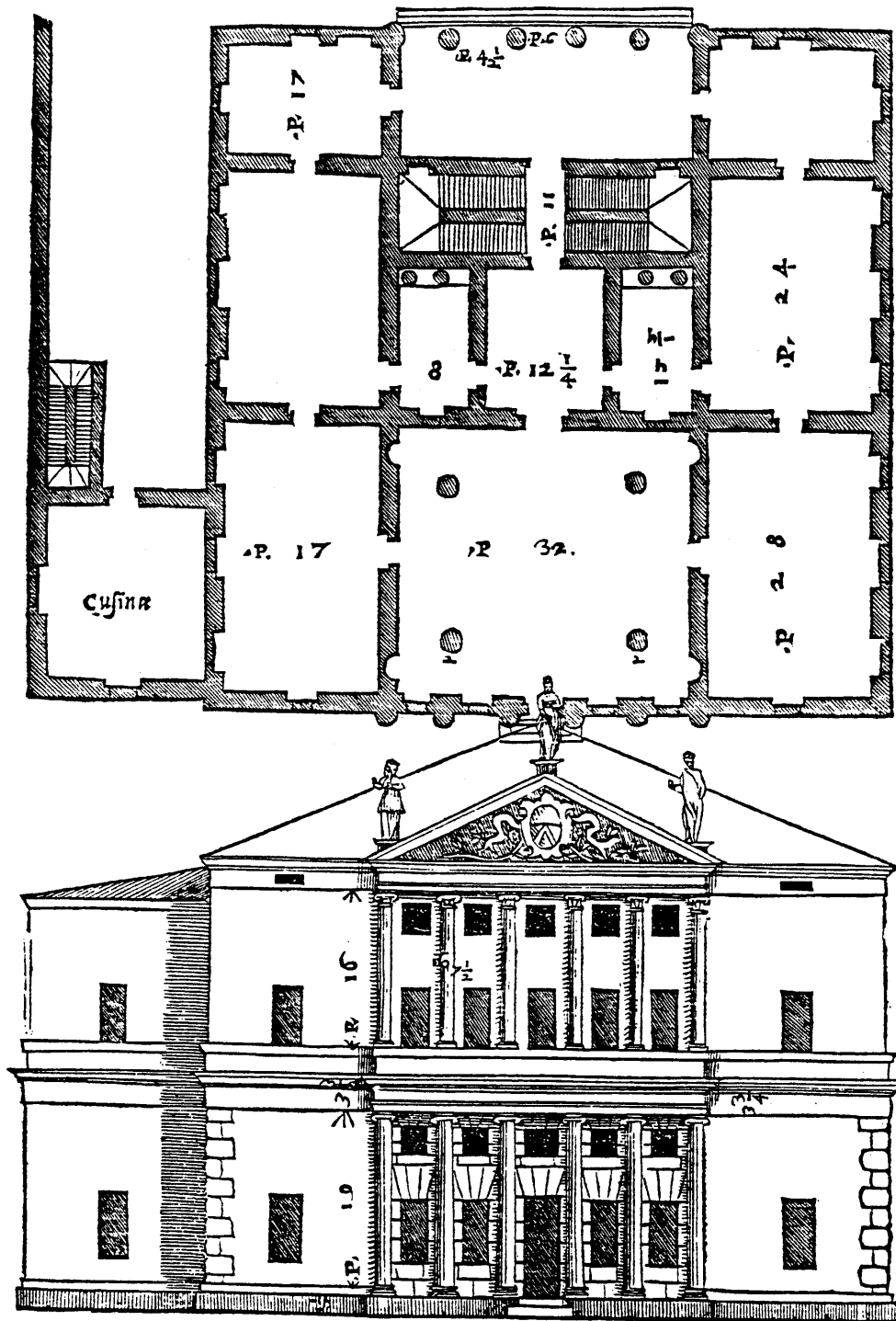


Fig. 120 - Andrea Palladio: plan and facade of Palazzo Antonini (from "Quattro Libri")

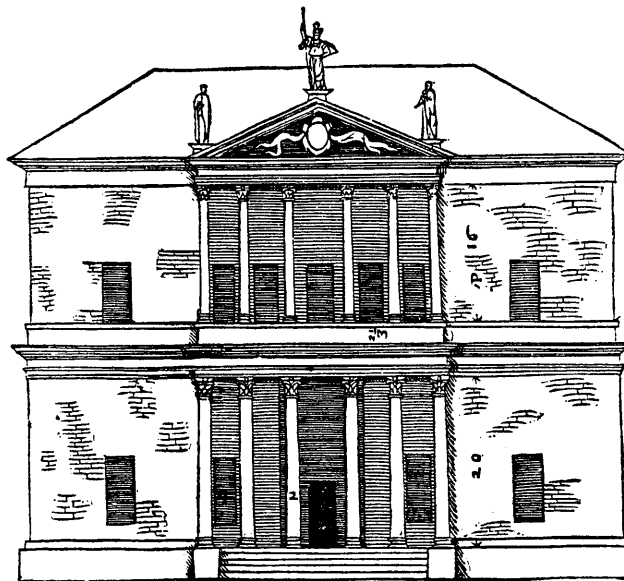
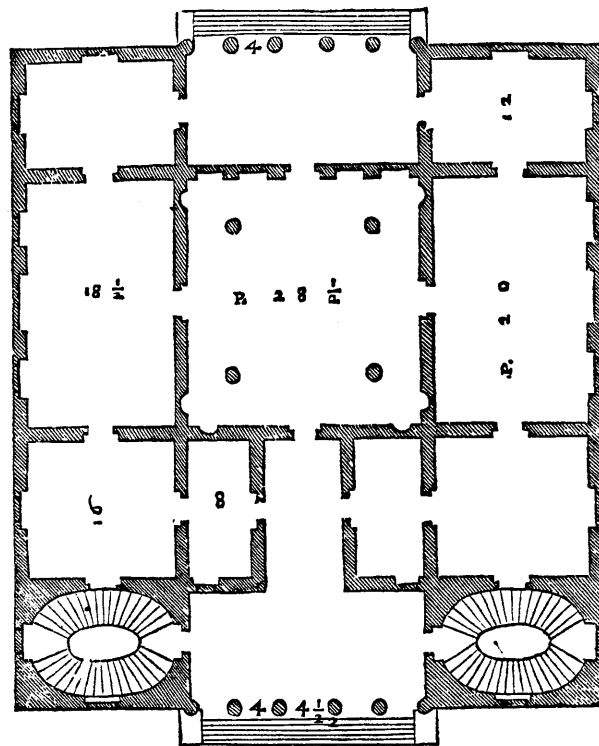


Fig. 121 - Andrea Palladio: plan and facade of Palazzo Garzadori (from "Quattro Libri")



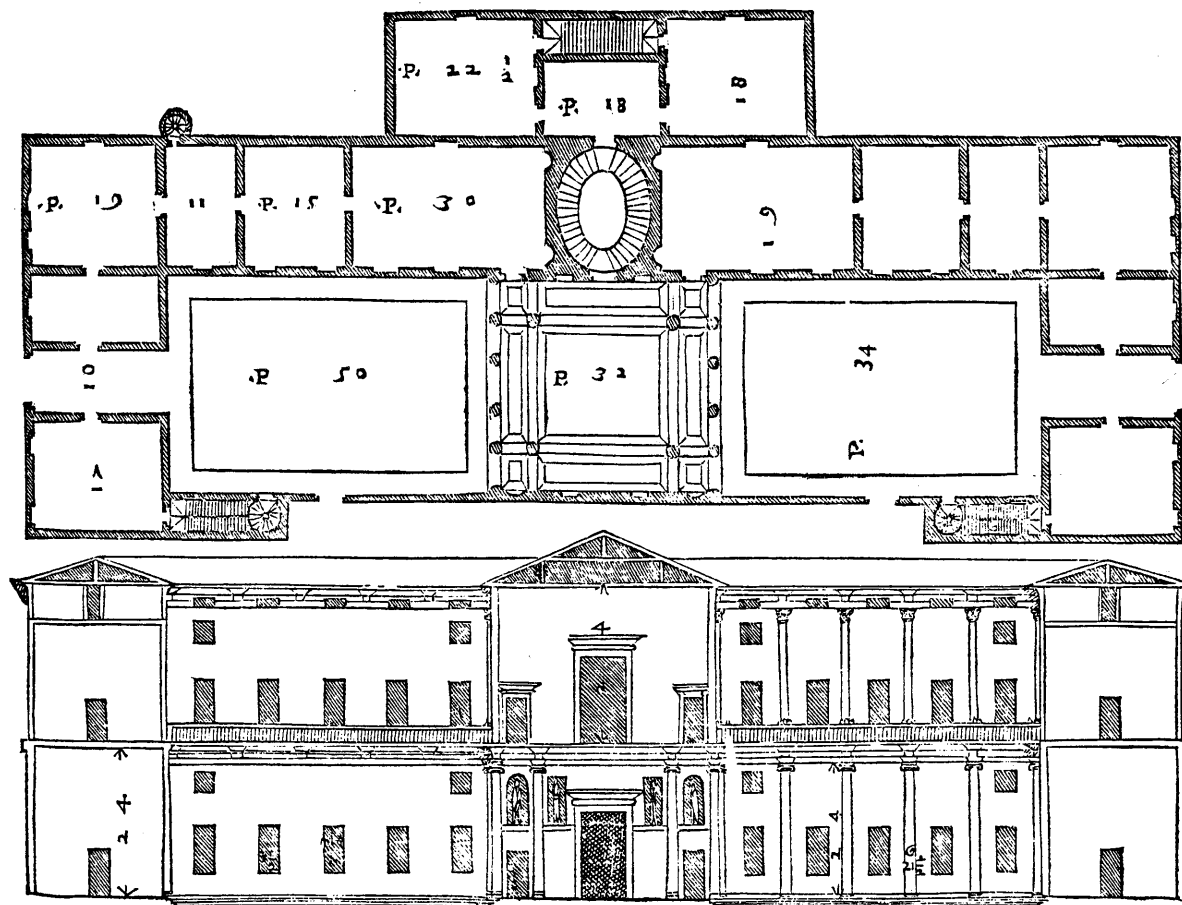


Fig. 122 - Andrea Palladio: plan and section of Palazzo Della Torre (from "Quattro Libri")